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ABSTRACT

This manual provides technical and practical assistance to teams of professionals who are interested in replicating a premilitary program. The stated purpose for the program is to help prepare young men and women to become qualified for military recruitment so they might reap the benefits provided by the military as well as civilian opportunities. Each chapter contains pertinent information relative to teaching and training at-risk young adults. The 15 chapters are as follows: "Prologue" (Jane Borne); "Review of Literature" (Lin Harper); "Basic Skills Assessment Tools" (Lewis Pulling); "Success Indicator Assessments" (Roger Goldberg); "Learning Capability Assessments" (Jane Cook); "Certification of Options" (Judy Alamprese); "Learning Modules Recommendations" (Jori Philippi); "Employability Certification Process" (Allen Jones); "Development of Individual Education Plans" (Jori Philippi); "Career Counseling Resource Center Recommendations" (Joyce Kinnison); "Program Evaluation" (Bill Griffin, Sue Lamborn); "Marketing Plan" (Linda Kobylarz); "Grass Roots Recruiting" (Lewie Mannino); "Administrative Overview" (Lin Harper); and "Conclusions and Recommendations" (Jane Borne). An appendix includes excerpts from a sample Job Training Partnership Act proposal. (YLB)

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A PLAN TO IMPLEMENT A PRE-MILITARY DEVELOPMENT PROGRAM

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THE UNIVERSITY OF MISSISSIPPI
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Address further enquiry to:

Dr. Jane S. Borne
P. O. Box 7785
Gulfport, MS 39506

A PLAN TO IMPLEMENT A
PRE-MILITARY
DEVELOPMENT PROGRAM

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THE UNIVERSITY OF MISSISSIPPI

Dr. Jane S. Borne
Project Director

EDITED BY DR. GAIL COTTON AND MS. LEWIE MANNINO

FOREWORD

The scope, vision and dream of our team of professionals who have worked diligently on this pre-military development project have been to build an avenue for young, at-risk adults--not an avenue full of pot-holes and detours--not an avenue which leads to dead ends--but a straight, clear avenue to the open highways and broad vistas of career opportunities, meaningful educational experiences, and enriched lives.

The United States Military provides for its members a sense of belonging, a positive work ethic, and career and social upward mobility which are essential ingredients in success. Therefore, the focus of our efforts in the Pre-Military Program has been to help prepare young men and women to become qualified for military recruitment so that they might reap the benefits provided by the military, as well as civilian opportunities.

The purpose of this manual is to provide technical and practical assistance to other teams of caring professionals who are interested in replicating this program toward the same goals. The nature of each chapter is to provide you with pertinent information relative to teaching and training at-risk young adults. To provide further practical assistance, excerpts from a sample JTPA proposal are included in the Appendix.

We hope this manual is helpful in your educational endeavors.

As Project Director, I wish to publicly acknowledge Dr. Gail Cotton, Ms. Lewie Mannino and Ms. Lin Harper and her staff for their inspired dedication and untiring commitment to this program. Also, I express gratitude and appreciation to Dr. Steve Selman and Dr. Anita Lancaster from the Department of Defense, and the administrators of the University of Mississippi, the Mississippi Gulf Coast Community College, National Occupational Information Coordinating Committee (NOICC) and State Occupational Information Coordinating Committee (SOICC).

Jane S Borne

Jane S. Borne, Ed.D.
Project Director

> *"Our nation's economic strength and vitality, our productivity, and international competitiveness, depend on our capacity to build and maintain a quality work force."*
>
> Building a Quality Work Force
> U.S. Department of Labor,
> Education and Commerce
> -July 1988

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"I feel so good about myself sometimes I just want to tell someone."

-Eddie, Participant

PROLOGUE

Jane S. Borne, Ed.D.

Introduction

In May of 1988, the National Broadcasting Company (NBC) had a one minute editorial on its 5:00 p.m. news about the all-volunteer military. In brief, the commentator indicated that because of the shrinking pool of eighteen year olds (up until the year 2000) the military needs fifty percent of American eighteen year old males to volunteer for the military. I questioned that estimate.

The next morning I called NBC News in New York to verify the statistic and to ask for the source of information. I was referred to Martin Binkin of the Brookings Institute in Chicago. My conversation with Mr. Binkin was enlightening.

Military

According to Mr. Binkin, author of Military Technology and Defense Manpower and America's Voluntary Military, the Department of Defense must find new approaches to enlarge its pool of potential and qualified manpower through the 1990's. Binkin's publications indicated that until 1988 there would be 1.8 million males who turn eighteen each year and who will provide the base for the pool for military recruitment. Of these 1.8 million eighteen year olds, 525,000 are dedicated college students who will enter college and stay at least three years. That leaves 1.3 million eighteen year old males as potential military manpower. However, from that number, 525,000 will not be qualified for military service due to mental, physical and/or moral reasons. Consequently, only 750,000 eighteen year old males will actually constitute the manpower pool. The military currently requires 375,000 recruits each year to maintain adequate numbers in the active and reserve services. Therefore, more than 50 percent of the non-college, eighteen year old males will be needed to enter the military each year.

A recent study by the Western Interstate Commission for Higher Education (WICHE) indicates that fulfilling this military re- cruitment need will become more difficult in the next decade because the number of high school graduates in every state and region will continue to decrease until 1989 when a slight upswing will be registered, but then will plummet reaching new lows in 1990-1995.

WICHE predicts the record low will be reached in 1992 when the pool of graduates will shrink to a level 22 percent below the record 1981 benchmark. These statistics have powerful and long-term implications:

1. Colleges and universities will address this decline in applications by accepting more foreign students and/or older students and/or by lowering academic standards for admission. A lowering of standards to accept less qualified students would further diminish the military manpower pool.

2. At the same time that colleges may be lowering their admission standards, or not raising them, the military by necessity is raising its standards for admission because of emphasis on high-tech and the mass utilization of high-tech equipment. This raising of standards also diminishes the available military personnel.

Therefore, it is imperative that the Department of Defense, colleges and universities work together to insure adequate manpower to supply both a volunteer military and a strong civilian society.

Recognizing the importance of these facts, it is essential that over the next decade or two the Department of Defense promote the military as a professional choice, tapping new sources of manpower to recruit for its volunteer service. The Department of Defense must court for recruitment those young people who will finish high school, who are able to learn high-tech skills and who are mentally, physically and morally fit. Additionally, it is important that high school students and their parents recognize the military's professional status as a viable and respected career option--a career option available only to competent, educated, healthy men and women.

An additional pool of possible recruits is the large number of young people who would like to enter the military and whose educational background is so weak that they are unable to achieve a qualifying score on the appropriate battery of tests. There are many of these young men and women who are salvageable if they could be removed from their limited home/community environment, placed in a resident program for specialized remedial and advanced education work, and given additional opportunities to develop their human potential. The implementation of this proposed pre-military model will provide that opportunity.

Labor

In the rural and urban south where job opportunities are limited there is a large segment of society who are undereducated and underemployed, resulting in a population of have-nots.

In the southern states, the military rejection rate of this have-not population is as high as 35 to 40%. The national average is 9%. This figure indicates that there are a large number of men and women between the ages of 17 - 30 who seek a term in the military and are rejected on the basis of making a non-qualifying score on the military entrance exam (ASVAB). A rejection by the military usually means a dead end for these people. One way of providing education, training, career opportunity and enhanced benefits for these have-nots is to enable those who desire military service, but do not academically qualify for it, to attain their goal.

Over the past few years military, educational and political leaders have expressed concern over the shrinking labor pool available for military recruits. Demographic data points to a continuing decrease in the number of high school graduates. Compounding the problem of a diminishing pool of potential recruits is the escalating demand for high-tech capability of recruits. To maintain a strong volunteer military it is essential that the Department of Defense tap new sources of manpower in its recruitment.

As an administrator at the University of Mississippi, I realized a specifically designed program for potential military recruits would have a far reaching impact on our institution and other institutions of high learning. As a concerned resident of Mississippi, I realized a specifically designed program to enhance the manpower pool for the military could indicate a "way out of despair" for many of our young people.

Upon further inquiry, I discovered that in Mississippi, and other Southern states, nearly fifty percent of young men and women who wanted to volunteer for the military were unable to do so due to deficiency in math and reading. I was astounded! Many, many young men and women who took the Armed Services Vocational Aptitude Battery (ASVAB) were high school graduates and still could not qualify in the academic areas. What were our schools doing, or not doing? It was clear that the military was relying on the civilian sector to prepare men/women for military service. The civilian sector, including schools, families and communities, were failing in that priority task.

After several conversations with educational and military personnel, it became evident to me that one solution to our education problems, our military recruiting problems, and our economic problems would be to find a way to expand the qualified manpower pool for military service.

Having had previous experience in designing special schools and programs, such as a school for gifted children, a dropout school and an institute for effective learning, I designed a conceptual program whose mission would be to recruit participants who want to enter the military, who do not pass the ASVAB, and give them a second, or in some case a first, chance for academic achievement.

I Presented this proposal to Chancellor Gerald Turner of the University of Mississippi. He, a man of vision, gave permission to pursue the concept. A talking paper was developed which described the need and suggested a plan to meet the need. The University of Mississippi proposed a unique educational opportunity for members of the at-risk population which could result in participants attaining an almost immediate career professionalization, complete with personal and family benefits in addition to a salary. Our proposed project was suggested as one way to prevent the continuation of welfare dependency for men and women by providing an avenue for these people to get off of welfare and become prepared for the high-tech labor market of the twenty-first century. An auxiliary mission of the program would be to review educational materials and approaches and select those that are most effective with the at-risk population. We would have the opportunity to synthesize basic skills remediation and drop out prevention. The proposed program could empower the at-risk segment of the population who have heretofore been powerless. This proposed model for pre-military development could provide potential sources to meet additional manpower needed by the military.

I then called Al Bemis, Military Liaison in Congressman G. V. (Sonny) Montgomery's office, to make inquiry about how to present this concept to the government.

Within five days I flew to Washington, D. C. to meet with Dr. Steve Selman, Director of Accession and Policy for the Department of Defense. Mr. Bemis, Dr. Selman, his associate, Captain Debbie Rogers, and I met to discuss the concept. Dr. Selman, a social psychologist by training, saw merit in the concept and, indeed, had tried similar programs in the past. The programs attempted in the past were not residential programs. He was willing to work with us in a planning grant phase to enhance the concept. The University of Mississippi subsequently wrote a detailed planning grant to the National Occupation and Information Coordinating Committee (NOICC) with funds originating in the Department of Defense. The grant was implemented in May of 1990.

As my colleague, Dr. Gail Cotton, and I worked on the plan it became apparent that to do adequate planning, we needed a small pilot effort to be underway immediately so that we could observe the program, discover strengths and weaknesses in detail, see first hand what worked and what didn't work. To our benefit there was some available JTPA eight percent discretionary money from the Governor's office of Literacy, the State Department of Education, and Labor Assistance, Department of Economic Development.

Since the University of Mississippi had no available dormitory space and was not located close to any military installations, it was decided to place the program in the very southern part of the state where there are nine military installations and where there was a community college campus with available dormitory and classroom space.

We met with the administration at Mississippi Gulf Coast Community College, Perkinston Campus, who agreed to sponsor the program, and together submitted a three month, then a twelve month proposal for a residential program to give academic remediation, life coping skills and physical training to young men and women, seventeen to thirty, who wanted to enter the military and who made a non-qualifying score on the ASVAB. We hired a highly trained director, Ms. Lin Harper, who then hired a remarkable staff of two full time instructors, two one half time instructors and several part time facilitating staff. The first resident participant was admitted on April 9 of 1990.

For the initial three month phase, we worked exclusively with the Mississippi National Guard. These military administrators, Colonel Robert Phillips, Major Elton Berry and Sergeant Paul Pursor, and Guard recruiters worked diligently to send participants who were in need. Fifty-eight were served in the first three months of the program. The grant was renewed for July 1, 1990, through June 30, 1991, with a goal of serving 150 participants.

In July of 1990, the program was opened to all military branches.

Dr. Jane S. Borne is Project Director for the University of Mississippi's Pre-Military Development Planning Grant. Dr. Borne has extensive experience in teaching, educational administration, and implementing innovative educational programs designed to meet specific target audiences. She is co-owner of an educational publishing company.

"My goal is to be in the United States Army within the next three months. This program is really, really great!"

-Emma, Participant

REVIEW OF LITERATURE

Lin Harper

Scope of the Search

This review was undertaken in order to examine the major methodological issues in adult basic skills training in the last two decades with special emphasis on military and pre-military basic skills research. Two Silver Platter electronic searches were done of the ERIC Document Database. The first search, time-limited to dates 1/76 to 12/82, searched for the descriptors ADULT-BASIC-EDUCATION, ADULT-LITERACY, OR HIGH-SCHOOL-EQUIVALENCY-PROGRAMS as delimited by the descriptors MILITARY-PERSONNEL, MILITARY-SERVICE, or MILITARY-TRAINING. The second search, time-limited to dates 1/83 to 6/90, was expanded in scope to include the descriptors ADULT-BASIC-EDUCATION, ADULT-LITERACY, HIGH-SCHOOL EQUIVALENCY-PROGRAMS, FUNCTIONAL-LITERACY, BASIC-SKILLS, MINIMUM-COMPETENCIES, FUNCTIONAL-READING, PROGRAM-EFFECTIVENESS, INSTRUCTIONAL-EFFECTIVENESS, ADULTS, or YOUNG-ADULTS as delimited by MILITARY-PERSONNEL, MILITARY-SERVICE, or MILITARY-TRAINING. These searches returned abstracts of a total of 244 documents. Review of the abstracts resulted in the examination of 31 full documents; this led to the examination of another 29 documents, including journal articles and government reports. All ERIC documents are cited using ERIC pagination.

Basic Skills Education In The Military: Valley Forge To FLIT

The U.S. military has had an important role in delivering basic skills education since Washington's chaplains were charged with providing literacy instruction for enlisted men at Valley Forge (Duffy 1983). During the Civil War, the Army offered literacy instruction to black civilians as well as enlisted men (Lancaster,1990). For more than one hundred years the U.S. military was a major provider of literacy instruction; however, these early efforts were directed at the socialization of students rather than military needs.

In the early twentieth century, this state of affairs changed. In World War I "Development Battalions" were formed by the Army "to train and assimilate men who had physical, mental, or moral limitations that were deemed to be remediable" (Lancaster,1990). In 1918, the Army, in reaction to the increasing complexity of military equipment and operations, introduced the first paper and pencil intelligence testing designed to screen low ability applicants out of the service (Duffy, 1983). Thirty percent of the 1.7 million men taking this Army Beta test could not read well enough to understand the form (Resnick and Resnick in Duffy, 1983). Since the time of this first testing effort, there has been a predictable variation in entrance standards during war and during peace-time.

With the start of World War II, this screening-out process was quickly transformed into a major educational effort in order to utilize as many able-bodied enlistees as possible. Literacy training during the war and in the subsequent decade was directed at men reading below the fifth grade level, as tested on a standardized reading achievement test. The Korean War brought another wave of literacy programs including the Army's Transitional Training Program, the Navy's Recruit Preparatory Training Study, and the Air Forces's Project 1,000 (Lancaster,1990). Sticht's (1982) review of these mid-century efforts concluded that "at the end of the '50's little benefit to job proficiency had been demonstrated to result from the provision of training in basic literacy skills" (p. 34).

In the 1960's, war again brought about a major basic skills training effort when Defense Secretary Robert McNamara lowered the Armed Forces Qualification Test (AFQT) standards in Project 100,000. During Project 100,000, each service established its own training programs. The Army initiated Army Preparatory Training (APT), the Navy Academic Remedial Training (ART) and the Air Force had a variety of reading improvement programs. These programs used a wide variety of methodologies which ranged from traditional G.E.D. classes to individualized, self-paced instruction developed by the Job Corps (Sticht, 1982). While each of these training programs had its own objectives and methods for reaching these objectives, the Project 100,000 enlistees who took part in these programs fared better than their low-skill-level predecessors with only "very small differences on the effectiveness of the personnel between those whose test scores were low and a control group" (Myth # 12, 1989). However, the lack of consistent, evaluative data concerned several groups looking into the effectiveness of military basic skills training (Sticht, 1982).

FLIT

By the mid-1970's, new, experimental programs were beginning to take their places among the programs established during the late 60's. The first of these programs was the Army-developed Functional Literacy (FLIT) program. The FLIT program used a combination of cognitive science and instructional science to teach cognitive strategies to students. This program, well documented by Sticht (1975,1982) saw the emergence of concepts that are central to almost every experimental program that followed. Students were taught the distinctions between "reading to do" and "reading to learn." Students were also taught basic skills in the context of their jobs. Graduates of the FLIT program showed the most dramatic increases of basic skills abilities up to that time (Sticht, 1982). FLIT was to be the cornerstone of a new wave of experimental programs which continue to evolve in all branches of the Armed Forces.

Civilian Efforts

As the military of the 60's struggled to develop basic skills programs for service men and women, the civilian world was also working toward the same goal. In 1964, President Lyndon Johnson signed the Economic Opportunity Act which established the national Adult Basic Education program. Two years later the Adult Education Act of 1966 was passed and signed into law. By 1970 ABE programs had been expanded to encompass GED preparatory programs; 1970 also saw the beginning of the ambitious Adult Performance Level (APL) Project, an attempt to define and measure adult achievement in terms of adult competencies rather than child-normed grade levels (Kitz, 88). The decade of the 70's saw a great deal of growth and experimentation in basic skills programs, which developed during the decade of the 80's, into fragmentation and chaos as individual states gained responsibility for program innovation and staff training. Parker (1990) points to two rays of hope during this period: the California and Maryland systems of state-wide competency-based training and the New York State External Diploma Program.

Why Teach What To Whom, When and Where?

So, as the military moved to find orderly means of assessment, delivery, instruction, and evaluation, the civilian adult basic skills community struggled with these issues in a maelstrom of conflicting theories and practices. The largely Federally-funded ABE program continued to be the most prevalent source of adult basic skills instruction for the civilian public. Ellis (1984) called ABE credible and cost effective but concluded that the program suffered under five major constraints: (1) lack of resources; (2) the perception that ABE is a continuum of K-12 school which is too regimented for adult learners; (3) recruitment and retention of students; (4) school setting having to follow K-12 school policies; and (5) a lack of state and federal leadership (p. 8).

It is in this atmosphere that one should look at Weisel's (1980) review of nine Ohio adult basic education programs. Weisel found that students spent more time in programs that had flexible scheduling, better staff communication, and short student intake procedures. However, Weisel supports longer intake procedures lasting more than one hour:

> This significant relationship between intake time and student hours of instruction might be interpreted as time given to clearly identify students' needs and goals from which to focus instruction. Hence, both the staff and students can work toward these specific needs, spending less time in the program. Another interpretation may include that a long intake system could "weed out" those students who have not clearly identified their educational goals or education as a priority (pp 12-13).

Balmuth (1986) concentrated on many non-methodological aspects of ABE programs, as well as the usual phonics or whole word, structured or informal issues. Personal contact with potential students was found to be a key element of recruitment success. Intake conferences and comprehensive reading diagnoses were found to be crucial. Teacher morale, sensitivity, and compassion along with the ability to explain things well were judged important. Also, long-term courses were found to be more successful than short-termed ones.

Problems typical to civilian adult basic education studies can be seen in Cox and Lane (1981). Attempting to field test a programmed workbook system, the Personalized System of Instruction (PSI), the researchers "encountered relatively few student-related problems but encountered a number of teacher-related and institution-related difficulties" (p. 54). The researchers had to deal with instructors who refused to take part in the study, small and dwindling numbers of students, disappearing ABE programs, substitution of teachers, lack of teacher training opportunities, lack of cooperation from teachers, and the fact that some of their students were actually enrolled in high school. In spite of these trials, the researchers concluded that the PSI, a highly structured but self-paced workbook system, merited further study for use with adults (p. 44).

Another study that ran into the realities of the adult education world was the Indianapolis Unmet Needs of Low Academic Adult (1-4th Grade Level) Students (1981). Several conclusions were able to be drawn from the study including that most low-level students drop out of adult education for reasons "which are outside of the classroom and largely beyond the teacher's control" (p. 37) and that adult basic education is "beneficial to nearly all who attend" even if they drop out (p. 34). However, just compiling the data proved to be the study's most difficult task:

> The interviewers were given 329 names of potential contacts and the interviewers successfully contacted 184 former students. The remaining 145 represents hundreds of attempts to locate former students. Many of these attempts had to be made in high crime areas of the city. No interview was abandoned until three separate attempts were made to locate and contact that person (p. 36).

Working with the higher-level basic skills students in GED preparatory classes had proven no easier. Moore's (1982) follow-up study of GED test-takers in Kentucky was hampered by state record-keeping practices. "The source for selection of survey recipients was considered as the most difficult task" (p. 6). The study concluded that "the successful GED candidate is more employable, more productive in terms of income, further education and training, and is more responsible toward civic responsibilities in voting than is the unsuccessful GED candidate" (p.41). It was also concluded that Kentucky Adult Education programs were "meeting the needs of adults" (p.41) even though students who took part in GED preparatory classes did not have as high a success rate on the test as did independent learners. The only common success factor found in the study was number of years of school completed (p. 39).

Phillips (1985) also focused upon factors other than methodology in adult education programs. This study reviewed fifteen adult literacy programs, including three military programs, examining program counseling, teacher attitudes, and the appropriateness of instructional materials. Phillips concluded that "No matter what philosophy a program espoused... teachers carried the main burden of providing counseling and other support" (30). The most crucial elements to successful programs were found to be teachers' attitudes of respect for learners, their backgrounds, and their life experiences (27).

Martin (1987) found that youthful high school non-completers were being served by a loose network of different kinds of agencies including employment and training programs, adult literacy programs, and alternative high school programs. Collaborative efforts among the different agencies in this network is important to the success of the individual agencies. Martin's research found that replicable features of successful programs included individualized and small group instruction, a small teacher/student ratio, teachers and staff who believe students can achieve, career-oriented instruction and instructional materials relevant to the needs and interests of the learners, clear rules that are stringently enforced, a program structured to help students work together constructively, career counseling and focus on occupational competence, long program cycles, personal and academic counseling with low student/counselor ratio, and trust in students to plan their own programs (pp. 53-53).

Fields, et. al. (1987) focuses on another aspect of basic skills training that operates largely outside of the network described by Martin, industry-based, workplace literacy. However, the researchers point out that small companies do need to avail themselves of the resources available through this network especially from community colleges and technical institutes (p. 41). This study reviewed nine industry-based programs from across the country and compiled case studies for seven of the programs. Once again the difficulty of program evaluation so common in civilian programs was pointed out: "Program evaluation tended to be informal and based on feedback from instructor, employee, and supervisor" (p. 51). The researchers found that programs fell into two rough groups: "(1) pre-1980, viewed primarily as traditional benefits for the employee; and (2) post-1980, viewed primarily as instruments for achieving the company's advanced technology goals" (p. 11). The study listed seven recommendations for planners and instructors working in workplace literacy:

> 1. The definition of literacy for the workplace should be expanded to include science and reasoning as pretechnical skills necessary for workers in high-tech industries.
>
> 2. Analysis of tasks to be performed on the job should be used as a basis for developing higher-order literacy skills among employees.
>
> 3. Companies should establish a secure atmosphere in which employees can assess and raise skill levels.
>
> 4. Whenever possible, companies should try to upgrade the skills of existing workers for new tasks rather than hire new workers and lay off existing workers.
>
> 5. Training managers need to develop clearer ways of showing return on investment in basic skills programs in order to enhance internal marketing of programs.
>
> 6. Collaboration should be maximized between industry and educational service providers whenever this provides high-quality instruction in a cost-effective manner.

> 7. Programs should be developed to update the skills of literacy teachers who are to be instructors in business and industry (pp. 51–52).

As can be seen in the above study, by the late 1980's, the chaos of civilian literacy efforts were beginning to be influenced by ideas rising out of military experimental programs. An important factor in this influence was the small handful of researchers who stood with feet in both worlds as can be seen in Sticht and Mickulecky's "Job-Related Basic Skills: Cases and Conclusions" (1984). Sticht and Michuklecky compared the Army's Functional Literacy (FLIT) Project with two civilian basic skills programs, pointing out that all three programs were most effective when basic skills were integrated with job skills. Addressing the civilian programs, the authors point out that "Probably the most significant conclusion to be drawn is that successful technical and basic skills training programs are beginning to emerge in the vacuum left unfilled by traditional schooling" (p. 26). Four principles for program development are presented: "(1) maintaining an orientation to the mission of the business, industry, or government organization for which basic skills programs are to be developed; (2) providing training in basic skills within a functional context; (3) arranging program conditions to maximize active learning time; and (4) using a competency-based, mastery learning instructional approach where possible" (p. 41).

Although the concept of functional contextual literacy had become well-accepted throughout the adult education profession by the end of the 1980's, there were still programs in the Armed Forces that had changed but little since the early 1970s. The circumstances that Duffy (1983) had described six years earlier could still be found. Thompson and Etheridge (1989) in a review of the Navy Campus Functional Skills Program concluded that "the program is only partially meeting its objectives. Many individuals with acceptable functional skill proficiency are inappropriately assigned; program criteria vary by location, and the curriculum objectives are not congruent with Navy workplace needs." (p. 4).

Program Success

Although military successes have so far been better documented, innovative programs both in and out of the military setting during the 1980's repeatedly tackled two major issues: (1) methods of delivery and (2) instructional content. Another important issue that has long been with the area of basic skills education but has yet to be addressed adequately is program philosophy. The new method of delivery that brought the most excitement during the decade was, without a doubt, computer-assisted instruction. Often, the very nature of computer-delivered lessons were antithetical to the most important movement in instructional content, contextual functional literacy; however, several military projects worked hard to integrate these two powerful new ideas.

Computer-Assisted Instruction

The 1970's brought a great increase in self-paced and individualized instruction, but these delivery methods also brought with them increased instruction costs. The next decade found many programs inside and outside of the military investigating the promise of computer-assisted instruction (CAI) in an effort to keep costs low while keeping instruction standards high.

Described as a "cost-effective, computer-based, Navy-related basic skills program" (Stolte and Smith, 1980, p. 1), PREST, Performance-Related Enabling Skills Training, was designed as an alternative to the Navy's traditional Academic Remedial Training Program, ART. A full description of the ART program is found in Bowman, et. al. (1984). Stolte and Smith describe ART as effective but costly in terms of student/instructor ratio (p. 9). Building on work done in the 1970's, PREST sought to make its computer-presented instruction contextual to the Navy setting. PREST was a fairly comprehensive program, addressing a total of 107 skills objectives. PREST was delivered on the PLATO terminal system and used some modified Control-Data software. A more complete review of PREST can be found in Stolte and Smith's final report on the project (1980).

Brownfield and Vik (1983) describe a computer-assisted-instruction program developed by the University of Maryland's Center for Instructional Development and Evaluation. The project known as STARS, Space Time Army Reconnaissance System, included sixty-five basic skills lessons which integrated both video and computer input and was presented on a touch-sensitive screen. Hardware was custom designed for the project and was highly advanced for this time period. Special emphasis was put upon the presentation of lessons in the form of games. The system not only delivered basic skills, but did so in a military context, another early example of the two areas of CAI and contextual education intersecting in the military setting. Duffy (1983) describes the heavy reliance on CAI in the Army's JSEP program, including the use of micro computers to deliver the instruction.

The Coast Guard's contribution to computer-assisted basic skills instruction is described in Glidden et al. (1984). The program used Control Data's PLATO basic skills curriculum integrated with traditional Navy-developed materials. The preliminary results cited in this paper were promising, showing an increase of 6.8 percentage points increase in math and verbal sections of the ASVAB (p. 18).

Buckley and Johnston (1983) evaluate a CAI pilot project used in four adult education centers in the Great Neck, New York area. Software used in this project covered the areas of reading, arithmetic, language, English, critical reading, and problem solving. The software and hardware used in the project was supplied by Computer Curriculum Corporation (CCC). Computer students out-performed non-computer students on a number of utilization, cognitive, and affective criterion. The study found that "the use of Computer Assisted Instruction leads to significant cognitive and affective growth" (p. 10).

Wangberg's (1986) review of the High Quality Educational Program Tracks points out that very little computer courseware exists for the illiterate adult (p. 123). This program sought to remedy this situation by creating a program that would enable the student to learn by using the language experience approach. The program developed relies on students gaining some keyboard skills. The hardware used to deliver the program is not identified. The first evaluations of the software showed some improvement in reading level; however, further evaluation was deemed necessary.

Contextual Literacy

The contextual literacy movement was presaged by the mood of adult educational reform of the late 1960's. By the time of the University of Texas's mammoth adult education evaluation project, the Adult Performance Level (APL) project, many critics were asking for more relevance in adult education (Koon, 1981). Koon, while criticizing the APL's evaluation uses, calls the APL as a beginning "point from which much may be accomplished in the future" (p. 236).

Another result from the early calls for relevance was the Army's seminal Functional Literacy (FLIT) Project described by Sticht (1975, 1982). FLIT was characterized by the use of new cognitive theories and teaching methodologies which led to an integration of basic skills instruction with actual job skills training. Sticht points out that FLIT considered reading as a psycholingistic process that has a direct bearing on cognitive skill acquisition. FLIT instruction was characterized as individualized, functional, systematic, and student-assisted (37). A distinction was made in FLIT instruction between "Reading to Do" and "Reading to Learn." FLIT proved to be a breakthrough in the military's search for effective basic skills programs as students showed dramatic increases in reading and cognitive skills, performing three times better than comparable students in other Army and Air Force programs (p. 39). FLIT was implemented in all Army training centers in 1974 as the Advanced Individual Training/Preparatory Training (AITPT) program. Sticht points out that AITPT was better received by Army training administrators than by Army education administrators who viewed this new approach to basic skills as "not real education" (p. 38). However, the results obtained from the FLIT project spoke for themselves and this concept of job-oriented literacy was quickly integrated into several other military projects.

The ready acceptance of these theories and methodologies by the training community can be seen in Willard's 1981 article, "Low-Aptitude Trainees Can Succeed." Although this article does not describe a literacy program, FLIT influence can readily be seen. Willard characterizes successful training as having carefully designed, self-paced materials that emphasize skills practice and performance testing.

Although the Army, Navy, and the Air Force all had job-oriented basic skills programs in development by 1983, Duffy (1983) was sharply critical of the slowness of basic skills reform in the military:

> Unfortunately curriculum efforts lagged significantly behind the policy. While there was what may be considered a prototype curriculum [FLIT] developed which embodied the policy, all in all the names of the programs changed but there was little change in content. In part this reflects resistance to the concept of functional, targeted literacy. The failure to provide the funding to support the policy implementation presented another basis for the lag in curriculum change (pp. 31—32).

Duffy identifies the Navy's Job Oriented Basic Skills Program (JOBS) as the "first major effort to extend the functional literacy concepts of the FLIT program beyond recruit training" (p. 36). JOBS courses varied in length from 120-140 instructional hours. Entrance into the program was limited to students who fell well below qualification requirements for technical training. Duffy reported that although JOBS students attrited at twice the rate of fully-qualified students, completers had job performance ratings only slightly below those of fully-qualified students and the discharge rate was actually less than half of the discharge rate of the fully-qualified recruit (38). The Army's Job Skills Education Program (JSEP), just being implemented by the Army when Duffy wrote in 1983, was built on extensive task analysis of basic skills requirements for Army recruits during their first tour of duty in 94 major areas of specialization within the Army. JSEP included a heavy reliance on computer-based instruction, as well as traditional methods of delivery. The Air Force's Job Oriented Basic Skills Assessment and Enhancement System was still in development when Duffy described their attempts to design a comprehensive and interrelated system of measurement and prescription (41).

An early endorsement of the Army's JSEP program can be found in Harmon (1983). This summary of three years of basic skills evaluation before service-wide implementation of JSEP concludes that while there were reservations to some of the computer presentations (16), JSEP's job-oriented basic instruction could be expected to "improve job skills and unit morale" (15). A detailed account of the Army's contextual literacy materials development efforts can be found in Vaughan, et. al. (1984). This paper traces the development of materials based on one single military occupation specialty (MOS), 31M10 Multichannel Communications Equipment Operator, through the task analysis, verification of the task analysis, design of the basic skills course, development of a screening/diagnostic test, development of specific course materials, and the validation of the course.

Sticht, a strong proponent of functional contextual literacy inside the armed forces, was one of the first proponents of extending this approach into civilian use (1986). Sticht's review of Project 100,000 found that low-aptitude personnel veterans earned more per hour, had less unemployment, and achieved more education than a similar non-veteran group of equivalent backgrounds. "Fully 68% of Project 100,000 veterans had used the G.I. Bill." (2). Sticht sets forth six principles of what he calls functional context programs:

To facilitate learning, functional context programs:

> 1. Let students know what they are to learn and why in such a way that they can understand the purpose of the training or education to their lives.
>
> 2. Develop new knowledge on the basis of old knowledge that the student has on entry into the program.
>
> 3. Develop new lessons on the basis of old lessons so that the new learning builds on prior knowledge.
>
> 4. Integrate instruction in "basic skills" such as reading, writing, and arithmetic into the technical training or academic content area courses to permit students to better negotiate the requirements for these skills in the program at hand, and permit them to transfer such skills to other, related settings.
>
> To facilitate transfer, functional context programs:
>
> 5. Derive objectives from an analysis of knowledge and skill demands of the situations for which the course is supposed to be providing human resources.
>
> 6. Utilize, to the extent feasible, contexts, tasks, materials, and procedures in the course taken from the setting that training and education address (pp. 4-5).

Since that time efforts have continued to transfer the functional contextual literacy model from the military to the civilian workplace. Philippi (1989) describes one such effort, the transformation of the Army's JSEP computer courseware to meet the needs of the Peavey Electronics Corporation in Meridian, Mississippi. The project was hampered by a number of equipment and software problems attributed to the subcontractors supplying the actual hardware and courseware; however, the overall effort was judged to be effective:

> Based on the analyses of data and materials collected during this evaluation, it is clear that the JSEP courseware has the potential to meet the needs of single employers in the private sector. Its effectiveness is evidenced in learner progress, in positive changes in performance on the job, and in both the valuative and attitudinal statements and behaviors of participating learners, instructor, managers, administrators and supervisors (p. 68).

Not all adult educators are sold on the concept of functional contextual literacy. Fueyo (1988), while calling for instruction that is relevant to student's lives in important ways, warns against reducing literacy to "technical literacy," or " individual mastery over sequenced, discrete mechanical skills where means become ends" (p 116). On the other hand, Kitz (1988) calls for just such reductionism, proposing research based on school-aged children be used to provide models for adult literacy use. Kitz calls for a highly structured, direct instruction method of teaching focusing on phonics, the antithesis of the general movement toward relevancy in adult literacy seen for the last twenty years.

However, the move toward contextual literacy continues, especially in the setting of workplace literacy. In a review of industry-based programs, Fields et. al. (1987) evaluated nine basic skills programs. Among their conclusions was "Occupationally relevant literacy skills are necessary for employees to become proficient in their jobs. Task analysis of occupations will help trainers develop the literacy instruction needed for occupational proficiency... using occupationally relevant material in teaching basic skills is likely to speed up the learning process and make the training more meaningful to workers" (pp. 40-41).

Kane, et. al. (1990) take functional contextual literacy as a given, stating in their introduction, "People learn best when they are taught in a context of application in a functional context" (p.1). However, the same education versus training issues that the Army first encountered in its FLIT program are still seen as major barriers. This report calls for a new language that can speak both to the world of work and the world of schools consisting of three elements: "The functional skills that describe what people actually do at work; the enabling skills, that is, the specific knowledge and procedures developed through the traditional teaching and learning activities of schools; and the scenario, a communication device to demonstrate the way in which work integrates these skills into a productive outcome (p. 2).

To Remediate or To Wash Out

During the 1980's, military basic skills programs multiplied greatly with every branch of the armed forces developing it own programs; by 1985 more than 307,000 soldiers were participating in on-duty basic skills programs, up from 200,000 in 1982 (Sticht in Myth # 12, 1989, p.4). The legacy of the Army FLIT Program and the rise of functional contextual literacy in general is chronicled in both Sticht's (1982) Basic Skills in Defense, and Duffy's (1983) Literacy Instruction in the Military. Both authors report good results from contextual literacy programs, Duffy pointing out that the military's considerable investment in basic skills training is money well-spent: "Literacy is perhaps more critical in the Armed Forces than in any other segment of our society" (p. 2). Both authors also point to the fact that the literacy requirements in the military are generally higher than in the civilian world.

However, despite this success and investment in basic skills training, there has been an on-going debate about the very existence of basic skills programs in the military. Sticht counts four traditional arguments, dating back more than thirty years, against the teaching of basic skills in the military:

> (1) avoiding the problem by pointing to the undesirable performance consequences of permitting the less literate to enter the military service; (2) the problems and costs of training the less literate; (3) the use of limited assignments in lieu of basic skills training; and (4) the ineffectiveness of basic skills programs in improving either basic skills or job training and performance (p. 16).

Sticht adds two more contempory arguments to the list:

> (1) the modern Army is more technologically complex than that of World War II, and hence greater demands for literacy exist, and (2) the problem of illiteracy is different today than in World War II because today most applicants for service have had opportunities for schooling and failed, whereas in World War II the undereducated had not experienced failure in school they simply had little education (p. 16).

Sticht counters these arguments with four arguments for military basic skills instruction:

> (1) many less literate personnel perform as well as more highly literate personnel and screening instruments are not accurate enough to distinguish the potentially adequate from the inadequate; (2) avoiding the

> marginally literate in peace time prevents the acquisition of leadership and training experience in training such personnel when mobilization requires their use; (3) literacy training and job skills training can be cost-effectively modified to improve the proficiency of the undereducated; and (4) demographics of the available manpower pool indicate the use of a significant number of marginally literate personnel (p. 16).

The Vietnam War era Project 100,000 is cited by many (Sticht 82, 86; Berlin and Sum, 88; Myth #12, 1989) as evidence that military remediation does work. Of 311,000 Project 100,000 recruits more than 8,000 were still in the military at least ten years later. Project 100,000 recruits who did not re-enlist were found to have better jobs and earn higher wages than a similar control group ten years later (Berlin, p. 55).

An incident which supports Sticht's argument that assessment tools are not adequate is the misnorming episode of the 1970's described in Lancaster (1990):

> In 1976, the Armed Services Vocational Aptitude Battery (ASVAB) was introduced for service-wide use as the military's enlistment test. It was later discovered that the Armed Forces Qualifications Test, or AFQT, which is a composite of the subtests from the ASVAB, was "misnormed", that is, raw scores on the AFQT were being improperly converted into percentile scores that inflated the true scores of many test-takers at the bottom of the scale. The errors were not discovered for about three years after the introduction of the new ASVAB. A replacement test was prepared as quickly as possible but not before four years and nine months of recruiting had elapsed under the "misnormed" version (pp 8–9).

Although some contend that discipline problems increased during the misnorming years, attrition actually decreased (Myth # 12: p. 4).

The cost of supplying basic skills instruction has long troubled many senior military staff. Sticht (1982) estimated total costs of basic skills instruction in all of the Armed Forces in excess of $70 million during 1981(p. 15). Attrition rates and recruitment costs are also quoted by the opponents of military basic skills programs. An extensive study by Parker (1989) found that successful GED takers who nevertheless score lower than 267 on the GED have a significantly higher risk of attrition. Parker recommends that GED scores themselves become part of the recruits personnel records (p. 124). Duffy (1983) found that Navy JOBS students had twice the attrition of fully-qualified students; however, he points out, that since none of the JOBS students had made minimum qualifications for technical training, any successful completers should be seen as a net gain (p. 37). Basic skills supporters have also cited attrition rates to support their cases. Bowman (1984), while not comparing Navy ART attrition rates with external rates showed a steady internal non-attrition rate rise from almost 92% in 1981 to almost 97% in 1983 (p. 14). Simmutis (1988), while reviewing the Army's BSEP and ESL programs, found that "Most significantly, all soldiers who needed and attended BSEP and ESL classes were more likely to reenlist and less likely to attrit than comparable soldiers who did not attend" (p. 13).

Certainly, the problem of under-educated enlistees does not look like it is going away. Adelsberger (cited in Parker, 1989) finds that "Although the pool of potential recruits has dropped in recent years, the mission of the U.S. Army Recruiting Command has increased more than 10%... recruits scoring in the top three categories of the qualification test dropped from 68% to 65%;.high school diploma graduates decreased from 93% to 91%" (pp. 110–111). Bowman (1988) shows that the average reading level of Navy recruits is near the 10th grade level with these rates remaining relatively stable. Bowman found greater variability from month to month than from year to year in graduation status, reading scores, and the number of recruits who read at less than the sixth grade level. Sticht (1982) points out that even with these numbers showing a declining or, at best, a stable, reading level in a setting that is steadily requiring greater reading skills, "the armed services are actually attracting and enlisting a force whose literacy skills are higher than those of the general youth population from which the Services recruit" (p. 24).

Perhaps the most compelling support for the continuance and further development of basic skills training in the United States Armed Forces comes from Sticht, et. al (1986) Cast-Off Youth: Policy and Training Methods from the Military Experience : "But in addition to the pragmatics of efficiency, one might also question the morality and ethicality of a policy that systematically excludes a group of citizens from many benefits during peacetime, but extends these benefits during wartime when the probabilities of being fatally harmed are much higher" (p. 3).

The Pre-Military Option

In 1977 the Congress showed their own concern over the costs of basic skills training in the military when they stated that "more effective use of these (education) monies would result from programs that emphasize educational skills prior to enlistment" (Congressional Record, August 4, 1977, PH8742, as quoted in Sticht, 1982).

This concern led both the House and Senate Subcommittees on Defense Appropriations to agree that the Department of Defense (DoD), the Department of Labor (DoL), and the Department of Health, Education and Welfare (HEW) should collaboratively design programs to meet the following objectives: (1) to provide basic skills remediation for those needing it; (2) to provide youth with the functional literacy needed to succeed in military training; and (3) to document mastery of the skills and award civilian academic credentials whenever possible (Lancaster, 1990, p. 15).

This led to the establishment of two programs designed to boost pre-enlistment skills for military recruits. One, under the direction of the DoL, sought to enroll unsuccessful military applicants in existing Job Corps centers for residential, remedial training. The other, implemented by HEW, delivered basic skills training in existing HEW adult learning centers. Unfortunately, both programs proved to be short-lived and unsuccessful as reported by Lancaster (1990).

The DoL program was never successful in getting the all-important referrals from military recruiters. Then the Job Corps tried to advertise the program on its own, which also failed. It is hard to draw any conclusions about the program since

> No formal evaluation of the Job Corps program was ever undertaken, so little is known concerning its effectiveness. There is no information on the number of people who enrolled in the Job Corps program for the purpose of enlisting in the military, nor is there any evidence on how many Job Corps enrollees ultimately enlisted... A key element of the project centered on the identification of young people who were interested in joining the military, and the referral system set up to accomplish this did not work properly. Without a reasonable connection between the military and the project, and without interested and informed participants, the project could not operate effectively (Lancaster, 1990: 16—17).

The HEW program fared no better. This program used learning centers that designed individually-tailored instruction for each of their students. Three methods of recruitment were used from the start of the project: (1) unsuccessful military applicants were given brochures describing the program, (2) recruiters sent follow-up letters to unsuccessful applicants, and (3) the learning centers were given the names, addresses, and phone numbers of these unsuccessful applicants unless the applicants denied permission to do this (Lancaster, 1990).

The HEW data collection effort was better than the DoL's; however, the results were similar:

> Ninety-three percent of those who failed the enlistment test asked that their names and identifying information not be given to the adult learning centers. Second, of the few who agreed to participate in the program, just 37 percent actually completed it. Furthermore, only one out of every 10 people referred to the adult learning centers completed the program and qualified for military enlistment (Lancaster, 1990: 17—18).

Why did these efforts fail? Lancaster (1990) puts most of the blame on the nature of the people the program was designed to help: "youth needing basic skills remediation did not want to attend educational programs... many of these people may have been seeking to escape the classroom environment by joining the military; thus, attendance at an adult learning center was not exactly what they had in mind when they applied to enlist" (p. 18). Lancaster also cites economic reasons for non-participation— "they may have chosen employment over an educational program that offered time-consuming effort, no remuneration, and no promise that they would ever be able to qualify for enlistment" (p. 18).

Despite the failures of these two early programs, the idea of pre-military basic skills instruction has resurfaced in recent years: "In its recent directive to the Department of Defense, Congress has expressed an renewed interest in pre-enlistment skill training 'that will help qualify youth for military service.' ...The Department has once again formed an inter-agency effort to examine the feasibility of developing a pre-enlistment skill training program that, if successful, could stand as a model for helping young people meet the aptitude requirements for military enlistment" (Lancaster, 1990: 19—20).

This effort, directed by the National Occupational Information Coordinating Committee (NOICC) and the Mississippi State Occupational Information Coordinating Committee (SOICC), has resulted in the University of Mississippi's model Pre-Military Program, which seeks to build on the research base of the last decade. This program will assist men and women between the ages of 17 and 30 years of age who want to enter the military but who have been rejected from enlistment because of non-qualifying scores on the ASVAB. The program will receive participants through the recruiting efforts of armed service recruiters who will refer them to the remedial program (Lancaster, 1990: 20).

The specific goals of the program are to provide participants with room, board, and remedial instruction; the instruction will be intensive and will include life coping/work/job skills, personal health enhancement, values clarification, and responsibility training, as well as more traditional reading, math, and English skills. Students' instruction will be self-paced and individualized and will include use of the Army's Job Skills Education Program. While only a one year effort, this program should provide a model which will prove helpful to human resource planners interested in identifying and assisting persons rejected for military service due to academic deficiencies (Lancaster, 1990).

During the first three months of the pilot project (April - June, 1990), 59 students referred into the program by Mississippi Army National Guard Recruiters were served. Of these 59, 15 were still-in-school youths, 32 were out-of-school youths, and 12 were adults, that is over 22 years of age. While only 26 of these 59 were counted as successful completers by JTPA definitions (44%), it was the feeling of program evaluators at both the state and local levels that much of this was due to the rapid nature of program start-up, leaving little preparation time for instructors. With this ratio of successful completions, the JTPA cost per successful participant was $2362.38, with an average length of stay being 32 days. During their stay, participants raised their math levels an average of 2 grade levels (as measured by the TABE) and raised their reading levels an average of 1 grade level (Harper, 1990).

Summary

The United States Military has been directly involved with the instruction of basic skills since its very inception. This involvement grew throughout the first six decades of the twentieth century. In the mid-sixties, in response to the increasing complexity of military equipment and jobs as well as the increased numbers of low-aptitude recruits resulting from Project 100,000, the military's commitment to successful basic skill programs intensified.

During the seventies, an Army research project, FLIT, produced results that would influence much of what was to come afterward. After FLIT, every branch of the Armed Services embarked on their own experimental basic skills programs. Many of these programs proved successful, and their well-designed studies built upon the previous knowledge-base established by military programs. Conversely, during this time civilian researchers struggled to find any valid conclusions amid the chaotic reality of civilian adult basic education, a world characterized by a lack of national leadership, conflicting goals, low student numbers, high attrition rates, untrained teachers, and woefully insufficient funding.

Researchers in both the civilian and military sectors concentrated on research on two major issues during the 1980s, the use of computer-assisted instruction and functional contextual literacy. The last half of the decade saw more and more military-supported research being used in civilian programs, especially those programs involved in workplace literacy. At the end of the decade, the military, although more deeply involved with basic skills training than ever before, was still uncertain about the appropriateness of delivering such skills. Even as this debate continues, the use of contextual literacy materials in the military becomes embedded in technical training to such an extent that distinctions begin to blur.

One proposed alternative to the military's delivery of basic skills training is the use of pre-enlistment training. First proposed in the 1970s, two pilot projects ended in failure. A new pilot project, operated by the University of Mississippi, seeks to capitalize on the decade of research, much of it done in military settings, that separates it from those earlier programs in its search for success.

Ms. Lin Harper, from Hattiesburg, Mississippi, is currently Director of the Pre-Military Development Program at Mississippi Gulf Coast Community College. Ms. Harper has eight years experience as a counseling psychologist and is co-owner of Interphaze, a technical communications consultancy.

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"I have learned a lot and my advice to anybody is `the Pre-Military Program can help you achieve your goal if you want to go into the military'."

-Eugene, Participant

BASIC SKILLS ASSESSMENT TOOLS

Lewis L. Pulling

Background

Applicants for enlistment in the Military are required to achieve a minimum score on the Armed Services Vocational Aptitude Battery administered by the Military. Applicants who fail to achieve the minimum score, but who are otherwise considered to be potential inductees, have the option of attending a Pre-Military development program which has been developed by the University of Mississippi under the direction of Dr. Jane Borne.

One of the challenges presented to the program is to make an assessment/diagnosis of the program applicant's strengths and weaknesses that will form the basis for an Individual Education Program (IEP) for the student and will provide summative data to validate the instruction program.

Current Practice

Currently the program, in operation at the community college, receives the sub-scores or grades achieved in the ten sub-tests of the Armed Services Vocational Aptitude Battery (ASVAB) for each applicant. The program has prioritized the curriculum to include only four of the sub-tests.

Since the contact time with the student is relatively limited, it was felt that these priorities would be of most help to the applicant in achieving a passing score on the re-test. The priority sub-tests are:

1. Arithmetic Reasoning
2. Word Knowledge
3. Paragraph Comprehension
4. Numerical Operations

Instruction is offered in each subject area partly as group instruction and partly in individualized tutorials. The faculty is provided with an IEP prepared by the program administrator. It is based largely on the TABE test and is reported by the faculty to be an accurate diagnosis and valuable planning resource.

Student Profiles

Students are currently taking the TABE test upon entry into the program. Scores concentrate in a narrow range about a mean grade equivalent score of 9.0. There is a wider range in the ASVAB student scores and there does not appear to be a strong correlation between the TABE and ASVAB scores. ASVAB scores have not so far been of benefit as a diagnosis measure.

There seems to be a commonly shared problem in arithmetic reasoning ability. Numerical operations deficiencies are somewhat less common, although algebraic proficiency is rare. Basic arithmetic operations are a serious problem for some applicants. Both vocabulary and reading comprehension weaknesses are common.

Current State of the Art in Testing Adults

Simply stated, our best tests are primitive. We have not yet mastered the art and science of standardized measurements of individual skills and weaknesses. The choices we have are only the best of the worst.

TABE

The Test of Adult Basic Education forms 5 and 6 published by CTB/McGraw Hill are norm-referenced tests designed to measure vocabulary, comprehension, math computation, math concepts and applications. The focus is on functional literacy and subject areas commonly found in ABE curricula.

While no test is without bias, this issue has been addressed with regard to ethnics, age and gender.

Level D covers a range of grade equivalent scores from 6.6 to 8.9 and is recommended for all applicants except those whose achievement levels are known to be below grade 6. Level M should be used in that event.

This test is easily administered and scored. An experienced diagnostician can prescribe the contents for an IEP from an interpretation of the sub-test scores.

The subject sections of vocabulary, comprehension, math computation and math concepts (word problems) track with the priority sections of the ASVAB test.

The TABE test produces raw scores, Stanine, percentile, as well as grade equivalent values. Form 5 can be used as a pre-test and form 6 as a post test. It is unlikely that significant grade equivalent gains can be made in the short period of training, but percentage gains in raw scores may well be statistically significant.

My recommendation is TABE again, not because of its excellence in meeting objective, but because it is the test of the poor.

GORT-R

Grays Oral Reading Test - Revised available from PRO-ED in Austin, Texas, and Steck-Vaughn.

This test measures oral language proficiency as well as vocabulary, comprehension and reading rate.

A miscue analysis of the student's performance is a valuable test for the diagnostician in developing the IEP.

The test covers a wide range of achievement levels and produces raw score, Stanine, percentiles, and an age level comparison. It has good readability. It has been normed for gender, residence, race, ethnicity and geographic area.

It is simple to administer, though it must be individually administered. It's Form A and Form B comparisons can be used as pre and post program evaluation.

GORT-R is an excellent diagnostic instrument. It measures real world comprehension and vocabulary rather than text book multiple choice proficiency. It does not measure mathematics skills.

CAT

California Achievement Test (CAT), CTB/McGraw Hill.

This test is designed primarily for school age students, but is extremely comprehensive. It tracks well with the ASVAB prerequisites including math.

Level 4 covers a grade equivalent range from primary to 13.6. Forms A and B provide the opportunity for pre and post program evaluation.

A language section of the test measures capitalization, punctuation, usage and language structure as well as spelling. These elements are not covered on the ASVAB test, but may contribute to a student's limited level of achievement.

While the test is widely used and widely accepted, we have not seen convincing evidence that bias has been adequately tested. The test tracks well with ASVAB and the same opportunities exist to use the test as a diagnostic instrument as are available from TABE. Forms A and B provide for pre and post testing.

Three standard tests are offered for consideration. We recognize that individual practitioners have personal preferences for tests not reviewed here. If they work for the practitioner, they are good tests. This list is not intended to exclude any instruments. The tests listed above are what we would recommend, but other tests available are: Nelson Dan, BAST, STANFORD, IOWA, WART and TOIL.

Summary

For a standardized test, we recommend TABE unless individual practitioners have extensive experience and a strong preference for an alternate test. Alternate tests must provide the basis for the development of an IEP that strengthens student's ability to demonstrate the competencies tested in the ASVAB.

Addendum

Literacy Research has prepared a battery of tests designed especially for the Pre-Military model at Perkinston Community College. This battery is designed specifically to measure skills required to achieve a passing score on the ASVAB test. It is divided into 4 sections.

Mr. Lewis Pulling is President of Literacy Resource Associates in Atlanta, Georgia. He developed a validated model of personal literacy and specific workplace literacy for industrial settings and provides literacy consulting for education and business organizations.

PRE-MILITARY PROGRAM

ASSESSMENT/DIAGNOSTIC INSTRUMENT

ARMED SERVICES VOCATIONAL APTITUDE BATTERY

This assessment instrument has been developed for the University of Mississippi by Literacy Research Associates. Reproduction of these materials is strictly prohibited, except for use in the program for which these materials have been designed.

AUTHOR
Lewis L. Pulling

Graphic Production
Dan Pulling

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Literacy Research Associates 6625 Williamson Dr. N.E. Atlanta, GA 30328 (404) 252-5064

VOCABULARY SECTION

General Vocabulary

Write a sentence using each one of the following words.

1. time ______________________________

____

2. evening ______________________________

____

3. company ______________________________

____

4. President ______________________________

____

5. New York ______________________________

____

6. girl ______________________________

____

7. lady ______________________________

____

8. husband ______________________________

____

9. school ______________________________

____

10. voice ______________________________

____

11. course ______________________________

____

12. force ______________________________

____

13. least ______________________________

____

14. life ______________________________

____

15. question ______________________________

____

16. have ______________________________

____

17. been ______________________________

____

18. look ______________________________

____

19. take ______________________________

____

20. own ______________________________

____

MATH VOCABULARY

Write a sentence using each of the following words.

21. equal ______________________________
____
22. percent______________________________
____
23. average ______________________________
____
24. square ______________________________
____
25. area ______________________________
____
26. decimal ______________________________
____
27. ratio ______________________________
____
28. length ______________________________
____
29. width ______________________________
____
30. vertical ______________________________
____
31. horizontal ______________________________
____
32. equivalent ______________________________
____
33. discount______________________________
____
34. profit ______________________________
____
35. value ______________________________
____
36. quotient ______________________________
____
37. rectangle ______________________________
____
38. perimeter______________________________
____

MATH REASONING SECTION

Read each on of the following problems and answer the questions after each problem. You don not need to workout the problem, only answer the questions.

EXAMPLE: Matty Smith earns $7.50 per hour. If he works from 8:45 A.M. until 5:15 P.M., with one hour off for lunch, how much money does he earn in one day?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

1. A stereo that was normally priced at $500 was reduced 15% during a weekend sale. An additional discount of 10% was available for payment in cash. What is the cash price of the stereo?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

2. A candy store sells 3 pounds of a candy mix for $4.80. What is the price of a half pound of the candy mix?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

3. A partnership agreement calls for two business partners to split the profits of their business by a ratio of 4:5. If the profits for the year are $72,000, what is the amount paid to the partner who gets the largest amount?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________

4. A woman has invested $5,000 in the money market at an annual interest rate of 8%. How much money does she earn in interest during a six month period?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________

c) What is the second quantity you need to calculate? ______________________

5. A mapmaker is told to prepare a map with a scale of 1 inch to 40 miles. If the actual distance between two points is 225 miles, how far apart should the mapmaker show the two points on the map?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________

c) What is the second quantity you need to calculate? ______________________

6. The cost of sending a telegram is $1.50 for the first 10 words and $0.05 for each additional word. How many words can be sent by telegram for $4.00?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________

c) What is the second quantity you need to calculate? ______________________

7. A military unit has 480 members. How many members of the unit are enlisted personnel, if 30% are officers?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________

c) What is the second quantity you need to calculate? ______________________

8. A platoon is composed of 11 enlisted men and one noncommissioned officer. A company of 132 enlisted men is to be divided into platoons. How many noncommissioned officers will be needed?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ____________________________

c) What is the second quantity you need to calculate? ____________________________

9. A man drove his car for 7 hours at 48 miles per hour. His car gets 21 miles to the gallon. How many gallons of gas did he use?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ____________________________

c) What is the second quantity you need to calculate? ____________________________

10. A triangle has two equal sides. The third side has a length of 13 feet, 2 inches. If the perimeter of the triangle is 40 feet, what is the length of one of the equal sides?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ____________________________

c) What is the second quantity you need to calculate? ____________________________

11. Carol works for an insurance agency at $8.25 per hour. She works Monday through Friday from 8:30 A.M. to 5:15 P.M. and gets an hour off for lunch. How much money does Carol make in one week?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ____________________________

c) What is the second quantity you need to calculate? ____________________________

12. A tree is 36 feet high casts a shadow 8 feet long. At the same time another tree casts a shadow 6 feet long. How tall is the second tree?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ____________________________

13. If the diameter of a circle is 10 inches, what is the circumference of the circle?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ____________________________

14. A production company manufactures wire wheels that sell for $34.50 each. What is the new price of the wheels, if the company raises the price of the wheels 22%?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ____________________________

15. A plane is flying from Atlanta to Denver. The plane leaves Atlanta at 2:30 P.M. and arrives in Denver at 4:55 P.M. If Denver is two hours behind Atlanta, how long does it take the plane to make the flight?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ____________________________

16. Anne works for the post office and makes $9.00 per hour. For every hour she works over 40 she is paid time and a half. How much money will Anne be paid, if she works 44 hours and 45 minutes in one week?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

17. The low temperature for the day yesterday was 5° and the high temperature was 47°. What was the average temperature for the day?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

18. A lawn is 33 feet wide and 19 feet long. How much will it cost to weed and feed it if a gardening services charges $0.40 per square yard for such treatment?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

19. If a barrel is 2 feet in diameter. How many cubic feet of water are in the barrel if the water is one and a half feet deep?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

20. If a 3 gallon bucket of liquid costs $24.00, how much does a 3 pint container cost?

a) Write a sentence that tells the answer and use a blank space for the "number" used in the answer.

____

b) What is the first quantity you need to calculate? ______________________________

c) What is the second quantity you need to calculate? ______________________________

COMPOSITION SECTION

Write a brief essay on your reasons for choosing an enlistment in the military.

READING COMPREHENSION SECTION

Read the following passage and answer the questions that follow the passage.

> Your beliefs, values, and ethics are the foundation of your competence as a leader. They guide you as you lead. Beliefs are assumptions or convictions that you hold as true regarding some thing, concept, or person. For example, you may believe that people can *only* be motivated by reward or punishment. That is a belief about human nature. You cannot prove it. Some people hold that belief, others do not.
>
> Values are ideas about worth or importance of things, concepts, and people. They come from your beliefs. They influence your behavior because you place importance on your alternatives depending on your system of values. For example, you place value on such things as truth, money, promotion, justice, and selflessness.
>
> Your values influence your priorities. Strong values are what you put first, what you defend most, and what you least want to give up. As a leader you may be confronted by situations where your value of candor (honesty) comes in conflict with your value of pleasing your boss. For example, if you failed to perform a security check as required, do you have the integrity and moral courage to put your error into your duty log?

1. What is the main topic of this passage? ______________________________

____

2. What is the main topic of the first paragraph? ______________________________

____

3. What is the main topic of the second paragraph? ______________________________

____

4. What is the main topic of the third paragraph? ______________________________

____

5. What is the difference between a belief and a value? ______________________________

____

6. How does the author define priorities? ______________________________

____

7. What is the difference between priorities and beliefs? ________________________________

____

8. What do you think the title of this passage should be? ________________________________

____

"I like the Pre-Military Program because it is giving me a chance to be somebody. It is giving me a chance to be on my own and to learn more about the world. It's letting me see what college is like and how fun it is to learn."

-Clenest , Participant

SUCCESS INDICATOR ASSESSMENTS

Roger Goldberg

The Problem

Employers typically use a number of techniques and instruments in order to select amongst potential employees. Interviews, reference checks, aptitude and intelligence tests, and review of employment applications are but a few of the tools available to facilitate the selection process.

It has been estimated that employee (i.e., military personnel) attrition in the Department of Defense costs over $8 billion on an annual basis. Lawrence (1987) estimated the cost of each attrition to be $18,400. Included in this is the cost of recruiting, selection, training and replacement for inductees not completing their first term of enlistment. Not included is the "cost" of reduced readiness and ability to accomplish the mission.

Department of Defense manpower analysts and policy makers have dedicated significant research energies to developing screening devices that would provide for better prediction of personnel potential for first term completion. For more than twenty-five years, the Department of Defense has used high school completion as a screening factor for entrance into the Armed Forces. Research conducted by Flyer and Elster (1983) indicated that 26% of high school graduates fail to complete their first term of enlistment compared to 44% for alternative diploma holders and 52% for those not having any high school credential.

For many years, the Department of Defense has used recruitment policies favoring high school graduates over non-graduates and graduates of non-traditional high school completion programs (e.g., GED and adult high school participants). In this instance, educational level is used to discriminate for the non-academic behavior of recruit tenure. Discriminating against alternative high school diploma holders in this manner has caused substantial upset within the academic community. In response to the academic community's criticism, the Department of Defense has developed the Armed Services Applicant Profile (ASAP). The ASAP is classified as a biodata instrument and follows the development of other biodata instruments previously developed for the Department of Defense, such as the Military Aptitude Profile (MAP), the History Opinion Inventory (HOI) and the Recruit Background Questionnaire (REQ).

Not unlike an employment application, the ASAP requires the applicant to respond to a number of biographical questions. Various studies have shown biodata instruments to be practical, valid and reliable in predicting employee tenure. Table I shows the ASAP to be an extremely powerful instrument for predicting

TABLE I

Expected Service Completion Based On Application Of The ASAP

	Percent Rejected				
	0	5	10	20	30
Percent 36-Month	70.0	71.4	72.5	74.4	76.1

tenure. The table illustrates, for example, that if the bottom five percent of personnel were not accepted for military service the thirty-six month (enlistment) completion rate would be 71.4% rising to 76.1% by rejecting the bottom 30%.

Unfortunately, the problem of predicting employee tenure has not generated much interest with respect to the corporate community; most research has been conducted either for the Department of Defense or for the individual military services. However, research conducted with civilian occupations, most notably for the retail and insurance industries, compares favorably with DOD research and there is strong support in both communities for use of biodata instruments for predicting employee tenure.

Statement of the Problem and Purpose of the Study

The University of Mississippi has established a Center for Pre-Military Development at the Mississippi Gulf Coast Community College in Perkinston, Mississippi. The function of the Pre-Military Program is to assist students in developing their basic, academic and life-coping skills so that they may successfully enter the military service or enhance and expand their career alternatives within the civilian labor market.

As participants in the Pre-Military Program may have academic, career and family life experiences of unknown impact on their potential for recruitment into the civilian labor force, there is a need to measure and predict their suitability for long-term employment.

Not unlike the military concerns expressed previously, potential employers are concerned with the tenure potential of students successfully completing the Pre-Military Program. Successful completion of the program may, in itself, be the most accurate predictor of success in any corporate training program. In any event, industry must have some assurance that their investment in the individual will be returned by a satisfactory tenure experience.

The purpose of this study is to determine if any instruments predictive of employee tenure are commercially available and with enough generality to be useful with regard to participants in the Pre-Military Program.

Review of the Literature

Reilly and Chao (1982) in their exhaustive review of employee selection procedures, concluded that only biodata and peer evaluation could be supported for predicting employee tenure. Interviews, self-assessments, reference checks, academic achievement, expert judgment and projective techniques all had levels of validity below those reported for biodata instruments.

Reviews by Owens (1976), Asher (1972), Schuh (1967) and Henry (1966) strongly support biodata validity. Asher's review (1972) compared the predictive power of biodata with that of other predictors, such as tests of intelligence and aptitude. In all cases and at all arbitrary validity coefficient cutoff points, biodata were clearly seen as the most valid predictors. The superiority of biodata was found to hold for criteria of trainability and for job proficiency.

Reviewing 58 biodata studies on employee tenure, Reilly and Chao (1982) developed the following predictive validities:

Occupational Group	Tenure
Military	.30
Clerical	.52
Non-management	.14
Scientific/Engineering	.50
Management & Sales	n/a
Average for the Criteria	.32

Nathanson (1975), in a study of 142 semi and unskilled workers, found worker preferences to be predictive of short term survival; whereas worker experiences--the type of data collected using the biodata/biographical method--to be more predictive of long term survival.

With the general acceptance, indeed preference, for biodata instruments having been established, this study will give particular emphasis to biodata instruments either commercially available or in the public domain.

Review of Available Instruments

It must be stressed at the outset, that the number of instruments purporting to predict employee tenure is extremely limited. Although a few commercial instruments are available, this area of employee selection has been largely ignored. Where projecting employee tenure has been considered essential, companies have generally used their own employment application forms and conducted correlational studies on the data gathered on the application forms with success in remaining on the job. Companies surveyed for the purpose of this study, indicated that tenure was best predicted/most often predicted by tenure in previously held positions.

The Educational and Biographical Information Survey (EBIS)

The Educational Biographical Information Survey (EBIS) was developed as part of a study of Department of Defense education and moral character selection standards conducted by the Human Resources Research Organization (HumRRO). The development of EBIS is comprehensively described by Means and Perelman (1984) and Steinhaus (1987) and a copy of EBIS is provided in Appendix A.

The biographical items included in the EBIS are covered in some detail; the published reports regarding EBIS are extensive and the rationale given in the EBIS literature is generally applicable to the inclusion of similar items in other biodata type instrumentation and may prove useful in developing an understanding of the construction of the EBIS and similar instruments.

Educational Data

Grades - Questions 1 - 5, 6 and 9

Questions 1 - 5, 6 and 9 on the EBIS are concerned with the educational credentials possessed by applicant. These questions were included due to the substantial body of research documenting the differences in attrition behavior amongst individuals possessing different types of high school credentials and those who do not.

A number of relevant correlates to educational status have been suggested, including motivation level, acceptance of authority, reading ability, social adjustment and specific learned skills. The most often cited probable causal variable is persistence.

Research relating military performance to high school behaviors suggests three measures, including school achievement, adjustment to the school environment and school discipline.

HumRRO (1976) in developing the 1975 version of the Military Aptitude Predictor (MAP) found school grades to predict better than any other item. Greenberg, Murphy and McConeghy (1977) reported that in the Navy and Marine Corps, attritions from military service reported lower grades and poorer academic skills than personnel remaining in the military.

Additionally, Bauer et al (1975) reported military personnel indicated they were disinterested in high school or found it to be boring to be at greater risk with respect to attrition.

Discipline - Questions 12 - 16

School discipline has also received attention and the assumption for inclusion of questions relating to school behavior is that individuals having difficulty modifying their behavior to conform to school standards will also have difficulty conforming to military behavioral requirements. Plag and Goffman (1966) found school expulsion to be one of the five most effective variables for predicting military tenure. Other studies, Booth, McNally and Berry (1978) and Hoiberg and Pugh (1977), strongly support the predictive validity of this variable.

Means and Perelman (1984) conclude from their analysis of the available research, "school discipline problems, even when measured solely through self reports, have been among the most useful pre-enlistment variables for predicting military performance"

Criminal Offense Data

Violations and Arrests - Questions 29 - 33

Several studies conducted for the Department of Defense by Plag and Goffman (1966), Bowser (1974) and Gaymon (1977) tend to suggest traffic violations and arrests may serve as useful predictors for military success. Indeed, as indicated above, violations and arrests may constitute the adult manifestation of the behaviors that lead to disciplinary problems in high school.

Alcohol and Drug Abuse - Questions 26 and 34

Although only 0.5 percent of military separations are related to alcohol or drug abuse, Greenberg, Murphy and McConeghy (1977) estimated that drugs or alcohol are involved in one out of six attrition cases. This finding establishes preservice drug or alcohol abuse as a critical screening factor for military accession.

Other Predictive Background Data

Employment History - Questions 19 and 20

Several studies conducted for the military have indicated modest relationships between employment history and success in the military. Plag, Goffman and Phelan (1970) found length of main civilian employment to be significantly related to military success and Bauer et al (1975) found successful military personnel more likely to have held a job prior to service accession. Attritions from the military having a job prior to enlistment were more likely to be dissatisfied with their pre-service employment experience.

Family Socioeconomic Status - Questions 21 and 22

Military studies regarding the role of family socioeconomic status are not consistent. Questions on this variable were included on the EBIS in order to disentangle the related factors of education level and aptitude--two variables that do predict military attrition and performance.

Family Stability - Question 23 - 25

Family experiences may influence the development of personality characteristics and behavioral attributes, both of which may be related to military adaptability.

Studies by Plag (1969) and Greenberg et al (1977) suggest military recruits with family problems (e.g., divorce, separation, drug abuse) experience a greater rate of separation from the military.

Youth Liability - Question 27

Non-conformist youthful behavior may reasonably be expected to be predictive of non-conforming behavior as an adult. Question 27 is intended to determine the respondents non-conformist behaviors.

Marital Status/Dependents

Research on both military and non-military personnel strongly supports both marital status and number of dependents as effective predictors of employee tenure. Beusse (1977) found married personnel less likely to have discipline problems and Greenberg, Murphy and McConeghy (1977) found tenure to be positively correlated with number of dependents.

Age

Lockman and Warner (1977) report the third best predictor of attrition (after education level and aptitude scores) to be the recruit's age, with younger recruits experiencing greater attrition rates than older recruits.

Sex

In the military, females tend to experience less tenure than males. Flyer and Elster (1983) concluded female attritions are much more likely to be related to marriage and pregnancy.

Race

Studies conducted for the military in 1973 and 1978, indicated black males tended to attrite at a rate greater than that experienced by white males, and black females attrited at a rate less than white females.

As race is related to other biographical elements, care must be taken that minority group members are not selected out because of race, when other factors are the primary contribution factor(s) for personnel attrition.

Reilly and Chao (1982) report some ethnic and racial minorities do not perform as well as majority applicants on widely used selection procedures and are consequently not selected at the same rate. Flaugher (1978) concluded that "knowing what we do about the relative status, socioeconomic and otherwise, of ethnic minorities in the United States, it would be surprising if most kinds of tests did not show mean differences in favor of the majority group."

Norming Statistics

Steinhaus (1988) in the HumRRO final report on EBIS reports the EBIS was administered to 34,000 military applicants and over 40,000 new recruits. While no single EBIS item was more predictive of recruit tenure than educational credential alone, a composite of the 29 EBIS variables was a more valid predictor.

Expectancy tables giving the probability of completing thirty months of military service were developed. At the mean score of 800, the empirical predictive value is .73 and the logisitic predictive value is .75 with an n of 779 individuals.

Although there are 34 questions in the EBIS, there are 121 potential responses. Each item was statistically evaluated on its distribution of responses, especially with regard to its relation to the criterion measure of attrition. Following item scaling, each item was reevaluated and a number were dropped from further analyses, including those providing low correlation with attrition.
Item scaling was conducted by assigning a value to each response corresponding to the percentage of tenured individuals selecting the response in the screening sample. A response alternative that was selected by more recruits surviving thirty months of military service was given a higher value than responses selected by personnel not meeting the criterion test. As an example, in responding to the question "ever been expelled", 75 percent of the respondents who answered "no" were survivors, compared to 62 percent of the respondents who answered "yes". Therefore a value of 75 was assigned to the "no" response and 62 to a "yes" response on this item.

Scaled scores for EBIS range from 736 to 820 with a mean of 800 and a standard deviation of 9.9.

Administration of the EBIS

According to Dr. Bryan Waters, HumRRO, the EBIS can be scored on any personal computer with subject responses either entered via the keyboard or through an optical scanner. Additionally, the EBIS can be hand scored. The EBIS is an untimed test and candidates should be able to complete the test in approximately ten to fifteen minutes.

While the EBIS was developed with Federal funds and is considered to be in the public domain, HumRRO would appreciate a request for authority to use the EBIS. HumRRO has expressed interest in an agency using the EBIS and may be able to make available scoring software and modifications to the EBIS to remove questions that may be considered sensitive or inappropriate to a particular application (e.g., criminal offense data).

Additional information regarding the EBIS can be obtained by contacting:

Dr. Brian K. Waters, Ph.D.
HumRRO
1100 South Washington Street
Alexandria, Virginia 22314

(713) 549-3611

The RBH Candidate Profile Record

National Computer Systems (NCS) publishes the RBH Candidate Profile Record for the selection of non-exempt clerical personnel. It is a 145 item untimed instrument and includes a double scoring system. The first score produces an estimate of employee performance and the second is an estimate of the tenure potential of those identified as high performers in the first scoring procedure.

Validity research is included in the CPR Technical Report and administrative instructions are published in the Administrator's Guide. Both documents, sample copies of the CPR and price information are available from:

Ms. Kim Horsager
National Computer Systems
5605 Green Circle Drive
Minnetonka, Minnesota 55343
(800) 676-2797

The PDI Employment Inventory

The PDI Employment Inventory was developed for a large national retail chain with approximately 45,000 employees in over 200 stores. The PDI employment Inventory was administered to 4,652 applicants, of whom 2,988 were subsequently hired. The employment status of the hired applicants was monitored to determine how long the applicants remained employed and if terminated, the reason for termination.

The PDI Employment Inventory contains 97 items and requires fifteen to twenty minutes to complete. Scoring can be accommodated through a PDI proprietary device or by using software compatible with any IBM-PC.

The following table provides the predictive results that may be expected by using the PDI Employment Inventory:

TABLE II

PDI Employment Inventory Tenure Probability Table

Tenure Score	Probability of Remaining on the Job
31 - 35	75%
26 - 30	56%
21 - 25	39%
16 - 20	20%
Below 15	8%

It would appear that the PDI Employment Inventory was developed across a broad enough range of occupations to have general utility for the selection of applicants where a predictive measure of employee tenure is considered essential. Over forty occupational titles were represented in the development of the PDI Employment Inventory, a number of which are presented in Table III (extracted, in part, from the Development and Validation [Report] of the PDI Employment Inventory, 1985).

Appendix B provides a sample copy of one page of the PDI Employment Inventory. Additional information on this instrument, including cost data and other publisher provided materials can be obtained by contacting:

Mr. Michael J. Carpenter
Director, National Accounts
Personnel Decisions, Inc.
2000 Plaza VII Tower
45 South Seventh Avenue
Minneapolis, Minnesota 55402-1608

(800) 633-4410

It should be noted that over ninety norming studies have been conducted in a variety of employment situations. While only the retail norming study from 1985 is cited, the test publisher may be able to make available additional norming study data. In some instances, the data is proprietary, but data for additional occupational groups should be easily accessible.

TABLE III

PDI Retail Job Titles

Assistant Head Cashier
Assistant Receiving Manager
Automotive Installer
Automotive Svc. Supervisor
Automotive Supervisor
Cart Attendant
Cashier
Checker/Marker
Department Manager
Dispensing Optician
Dispensing Optician Trainee
Dock Worker
Fitting Room Attendant
Food Svc. Counter Attendant
Food Svc. Manager
Garden Shop Specialist
Gas Station Supervisor
Head Cashier
Jewelry Supervisor
Lead Automotive Installer
Lead Maintenance Worker
Lead Switchboard Operator
Loss Prevention Dept. Manager
Maintenance Worker
Management Trainee
Mechanic
Merchandise Clerical
Merchandise Specialist
Personnel Coordinator
Sales Auditor
Satellite Receiving Worker
Senior Receiving Clerical
Store Security Officer
Utility Attendant

The Employee Reliability Inventory

The Wonderlic Employee Reliability Inventory includes among its six scales, scale Q which purports to measure employee long term commitment. The use of the Wonderlic ERI cannot be enthusiastically recommended. The sample size in developing this scale was quite small (n = 126) and the discriminant function is between individuals who remained on the job for more than thirty days and those who quit within thirty days.

For the stated purposes of the Pre-Employment Center, the Wonderlic ERI is not recommended.

For those readers who wish to learn more about ERI, additional information may be obtained by contacting:

Mr. Fred M. Rafilson
Assessment Specialist
E. F. Wonderlic Personnel Test, Inc.
820 Frontage Road
Northfield, Illinois 60093

(800) 323-3742

Conclusions

There are two viable instruments available for predicting employee tenure for participants in the Pre-Military Program, the Educational and Biographical Information Survey (EBIS) and the PDI Employment Inventory. Selection ought ultimately be based on several factors:

1. Authority by HumRRO to use the EBIS at the Center for Pre-Military Development
2. Acceptance of EBIS results by business and industry
3. Cost of administering either the EBIS or the PDI Employment Inventory

While HumRRO appears interested in an application for the EBIS and may authorize its use by The Center for Pre-Military Development because it was developed for military recruit selection, acceptance of the EBIS results may be difficult within the civilian labor market. It may be desirable to summarize portions of this report in order to gain acceptance of the EBIS by industry considering graduates of the Pre-Military Program for employment.

Acceptance of the PDI Employment Inventory should be much less difficult, as there are a substantial number of norming studies conducted in a variety of industrial settings. The PDI Employment Inventory is commercially available and if cost is of minimal concern, may ultimately be the instrument of choice.

Mr. Roger Goldburg is currently Head, Examination and Certification Program Department for DANTES in Pensacola, Florida. He has extensive experience in Systems analysis, personnel management and human resource development.

APPENDIX A

EDUCATIONAL AND BIOGRAPHICAL INFORMATION SURVEY

DIRECTIONS

Some of the questions on this form ask you to pick the one best answer. Other questions ask you to mark more than one answer. You should read all questions carefully and follow all the instructions.

Your answers will be read by a machine. You should:

- Use only a number 2 pencil.
- Make heavy black marks that completely fill in the circle for your answer. (See below.)
- Erase completely and neatly any answer you want to change.
- Make no extra marks or comments on the form.

These marks will work: ● ● ●

These marks will NOT work: ① ⊗ ⊘ ∅ ○

NOTICE

The Department of Defense is asking for information about your education and life experiences.

You are being asked for your identification number so that information about you from your enlistment application and service file can be added to the information you provide on this questionnaire. Your answers will be put together with answers from other people like you to get a picture of the kinds of people who successfully complete their terms of military service.

Providing information in this questionnaire is voluntary. No penalty will be imposed for failure to respond to any particular questions.

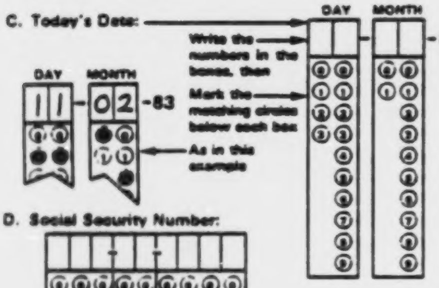
A. Survey location type:

○ MEPS ○ MET Site ○ RTC

B. Sex:

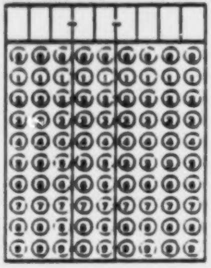
○ Male ○ Female

C. Today's Date:

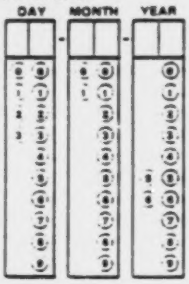


DAY
MONTH
-83
Write the numbers in the boxes, then
Mark the matching circles below each box
As in this example
DAY
MONTH
11
02
-83

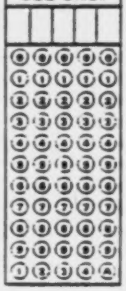
D. Social Security Number:



E. Date of Birth:



COMPUTER USE ONLY



Questions 1-7 ask about how much education you have had. If you are in school now, in questions 1-7 mark the grade or diploma program you will have finished when you enter active duty.

1. How many years of school have you completed? (If you are in school now, mark the grade you expect to complete before entering active duty)

○ 8th grade or less
○ 9th grade
○ 10th grade
○ 11th grade
(Skip to Question 5)
○ 12th grade
○ Some college—Less than two years
○ Some college—Two or more years
○ College—Four-year degree
○ Some graduate school
○ Graduate degree (master's or doctorate)

2. Do you have a regular (day program) high school diploma? (Do not count diplomas from evening, adult education, or correspondence school programs here)

○ No. (Skip to Question 5)
○ Yes

3. What kind of high school is your diploma from?

○ Public high school (Skip to Question 6)
○ Private high school
(Show below the type of private high school)
  ○ Catholic
  ○ Other church-related
  ○ Not church-related

4. If you earned a high school diploma from a private school, was your school accredited (approved) by your state?

○ Yes
○ No
○ I don't know

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5. Have you earned any of the credentials shown below? (Mark all that apply)
- ○ GED
- ○ High school equivalency certificate for passing a test other than the GED
- ○ High school diploma from an adult education or evening school program
- ○ High school diploma from a correspondence (home study) school
- ○ None of these

6. If you have either a high school diploma or an equivalency certificate from a public school or program (include GEDs and high school diplomas from adult education or evening programs), show what state it is from.

- ○ ALA.
- ○ ALASK.
- ○ ARIZ.
- ○ ARK.
- ○ CALIF
- ○ COLO.
- ○ CONN.
- ○ D.C.
- ○ DEL.
- ○ FLOR.
- ○ GA.
- ○ HI.
- ○ IDAHO
- ○ ILL.
- ○ IND.
- ○ IOWA
- ○ KANS.
- ○ KY.
- ○ LA.
- ○ MAINE
- ○ MASS.
- ○ MD.
- ○ MICH.
- ○ MINN.
- ○ MISS.
- ○ MO.
- ○ MONT.
- ○ N.C.
- ○ N. DAK.
- ○ NEBR.
- ○ NEV.
- ○ N.H.,
- ○ N.J.
- ○ N. MEX.
- ○ N.Y.
- ○ OHIO
- ○ OKLA.
- ○ OREG.
- ○ PA.
- ○ PUERTO RICO
- ○ R.I.
- ○ S.C.
- ○ S. DAK.
- ○ TENN.
- ○ TEX.
- ○ UTAH
- ○ VA.
- ○ VT.
- ○ WASH.
- ○ WIS.
- ○ W. VA.
- ○ WYO.
- ○ OUTSIDE U.S.

7. What kind of courses did you take most of when you were in high school? (Mark only one)
- ○ General (basic)
- ○ Academic or college preparatory
- ○ Vocational, technical, or business
- ○ Other

8. How would you describe the grades you made in high school? (Mark only one)
- ○ Mostly As
- ○ About half As and half Bs
- ○ Mostly Bs
- ○ About half Bs and half Cs
- ○ Mostly Cs
- ○ About half Cs and half Ds
- ○ Mostly Ds
- ○ Mostly below D

9. When you were in high school, did your school have a minimum competency or proficiency test that all students had to pass to get a high school diploma?
- ○ No. (Go on to Question 10)
- ○ Yes
  (Mark the statement below that describes how you did on the test)
  - ○ I took this test and passed it
  - ○ I took this test but did not pass it
  - ○ I have taken this test but don't know my results
  - ○ I have not yet taken this test

10. For each of the subjects below, mark the statement that describes your high school grades.

	Never took this subject	Mostly As and Bs	Mostly Bs and Cs	Mostly Cs and Ds	Mostly Ds and Below
Mathematics	○	○	○	○	○
English, Literature	○	○	○	○	○
Vocational/Shop	○	○	○	○	○
Science	○	○	○	○	○

11. Were you in any of the activities below during high school? (Mark one response for each activity)

	Did Not Participate	Participated	Participated as a Leader or Officer
Athletic teams	○	○	○
Drama, music, art, chorus	○	○	○
School clubs	○	○	○
Other clubs (Scouts, "Y", Boys Club, 4-H, etc.)	○	○	○

12. Were you ever suspended from school?
- ○ No. (Go on to Question 13)
- ○ Yes.
  (Show how many times at each grade level below)

I was suspended: (Mark all that apply)	Grades 5-6	Grades 7-8	Grades 9-12
Once while attending grades	○	○	○
Two or more times while attending grades	○	○	○

13. Were you ever expelled from school?
- ○ Yes
- ○ No

14. In your last year of school, about how many days from the beginning of school in the fall up until Christmas vacation, were you absent for any reason, not counting illness?
- ○ 0 days
- ○ 1 or 2 days
- ○ 3 or 4 days
- ○ 5 to 10 days
- ○ 11 to 20 days
- ○ 21 or more days

15. Did you ever get into trouble at school for doing any of the things below? (Mark all things for which you were sent to the principal's office, suspended, or expelled)
- ○ I was never sent to the office, suspended, or expelled
- ○ Missing class
- ○ Skipping school
- ○ Fighting
- ○ Being disorderly
- ○ Bad language
- ○ Smoking
- ○ Talking back to teachers
- ○ Other reasons

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16. If you ever thought about quitting high school, show why. (Mark all that apply)

- ○ I never thought about quitting high school
- ○ My family needed money or needed me at home
- ○ I was expelled or suspended
- ○ I was bored, wasn't learning anything useful
- ○ I got married or became a parent
- ○ I was getting bad grades
- ○ I didn't get along with the other students
- ○ The rules were too strict
- ○ I wasn't going to graduate on time
- ○ I didn't get along with the teachers, counselors, or the principal
- ○ I wanted to work full time
- ○ Other reasons

17. Where did you live most of the time between the ages 8 and 17?

- ○ Large city (100,000 or over)
- ○ Suburb of a large city
- ○ Small city or town (not a suburb of a large city)
- ○ Rural (country)
- ○ Hard to say, I moved around a lot

18. When you were growing up (ages 8 to 17), were either of your parents in the military?

○ Yes ○ No

19. Since you were 16 years old, what is the longest period of time you have ever held the same full- or part-time job? (Answer for both types of job)

	FULL-TIME JOB	PART-TIME JOB
Never had this kind of job	○	○
Less than 2 months	○	○
2-6 months	○	○
7-11 months	○	○
1 year or more	○	○

20. Below are some reasons people leave jobs. Have you ever left a job for any of these reasons? (Mark all that apply)

- ○ I haven't had a job outside the home
- ○ I went back to school
- ○ The pay was not good
- ○ I was laid off
- ○ I was fired
- ○ I found a better job
- ○ I moved to another location
- ○ I didn't get along with my supervisor
- ○ I was arrested
- ○ There was no chance to get ahead
- ○ The working conditions were bad (dangerous, hot, dusty, etc.)
- ○ To join the military
- ○ Other reasons

21. What would you say was the average total amount of money your family made per year when you were 14 to 17 years old?

- ○ $6,999 or less a year
- ○ $7,000 to $11,999 a year
- ○ $12,000 to $15,999 a year
- ○ $16,000 to $19,999 a year
- ○ $20,000 to $29,999 a year
- ○ $30,000 or more a year

The next four questions ask about your parents or guardians. Answer for those adults with whom you lived for the longest time between the ages of 8 and 17.

22. Below, education levels are listed from lowest to highest. What is the highest level of education completed by each of your parents or guardians? (Mark one for each parent)

	FATHER/MALE GUARDIAN	MOTHER/FEMALE GUARDIAN
Did not live with this parent or guardian	○	○
Eighth grade or less	○	○
Some high school	○	○
GED	○	○
High school graduate	○	○
Technical or trade school after high school	○	○
Some college	○	○
College degree (four- or five-year)	○	○
Graduate school	○	○
Don't know	○	○

23. Which one of the statements below best describes each of your parents in terms of discipline? (Mark one for each parent)

	FATHER/MALE GUARDIAN	MOTHER/FEMALE GUARDIAN
Did not live with this parent or guardian	○	○
Very lenient: let me do whatever I wanted	○	○
Pretty lenient: let me make most decisions for myself	○	○
In between: could be easy-going or strict	○	○
Pretty strict: decided what I should do a lot of the time	○	○
Very strict: tried to control everything I did	○	○

24. Did your father (or male guardian) live at home until you were 16?

○ No. (Go on to Question 25)

○ Yes.

(Show whether or not he had any of the problems listed below)

	Yes	No	Don't Know
Drinking problem	○	○	○
Drug problem	○	○	○
Arrest record	○	○	○
Mental illness/breakdown requiring treatment	○	○	○

25. Did your mother (or female guardian) live at home until you were 16?

○ No. (Go on to Question 26)

○ Yes.

(Show whether or not she had any of the problems listed below)

	Yes	No	Don't Know
Drinking problem	○	○	○
Drug problem	○	○	○
Arrest record	○	○	○
Mental illness/breakdown requiring treatment	○	○	○

Most of the questions below are similar to ones you have been asked already. Please answer them again for this study.

26. Has drinking ever led to your loss of a job, arrest, or treatment for alcoholism?

○ Yes
○ No

27. How old were you the first time you ever:

	I Never Did This	Age 14 or Younger	Age 15-17	Age 18 or Older	Don't Recall Age
Held a paying job outside the home	○	○	○	○	○
Went out on a date	○	○	○	○	○
Ran away from home for more than one day	○	○	○	○	○
Smoked cigarettes	○	○	○	○	○
Got drunk	○	○	○	○	○
Used marijuana/hashish	○	○	○	○	○
Used hard drugs (heroin, cocaine, etc.)	○	○	○	○	○

28. Over the last three years, how often have you gotten into physical fights with other persons?

○ Never
○ Once or twice
○ Occasionally
○ Fairly Often
○ Often

29. Have you ever been convicted or paid a fine for traffic violations (including parking tickets)?

○ No. (Go on to Question 30)
○ Yes.
(Show below the most parking and the most non-parking violations you ever had in a single year)

	1	2	3	4	5	6 or More
Parking violations	○	○	○	○	○	○
Traffic violations other than parking	○	○	○	○	○	○

30. Have you ever been arrested for any of the following offenses? (Mark one for each offense)

Offense	No	Yes, Arrested But Not Convicted	Yes, Arrested and Paid Fine/Convicted
Unauthorized use of a motor vehicle	○	○	○
Disorderly conduct	○	○	○
Drunken driving	○	○	○
Drug-related offense	○	○	○
Theft/larceny/burglary/breaking and entering	○	○	○
Assault/battery	○	○	○

31. This question is about misdemeanors. (Misdemeanors usually do not have jail sentences of more than one year.) Have you ever been convicted of a misdemeanor? (Fines, suspended sentences, and probations should be counted as convictions.)

○ No. (Go on to Question 32)
○ Yes.
(Show below the largest number of convictions of each type you ever had in a single year)

(Mark one for each)	Most Times in a Single Year 0	1	2	3	4 or More
Given a fine or probation with no sentence	○	○	○	○	○
Given a sentence of less than 4 months	○	○	○	○	○
Given a sentence of 4 months or longer	○	○	○	○	○

32. Questions 32 & 33 are about felonies. (Felonies usually carry jail sentences of over a year.) Have you ever been arrested or convicted of a felony as an adult (age 18 or older)?

○ No. (Go on to Question 33)
○ Yes.
(Show below the total number of times each of these happened to you since age 18)

(Mark one for each)	Total Number of Times 0	1	2	3	4 or More
Arrested but not convicted	○	○	○	○	○
Convicted and given a sentence of less than one year	○	○	○	○	○
Convicted and given a sentence of one year or more	○	○	○	○	○

33. Have you ever been convicted of a felony when you were under 18?

○ No. (Go on to Question 34)
○ Yes.
(Show how many times below)
○ Once
○ Twice
○ 3 or more times

34. Other than times when prescribed by a doctor, how many times have you ever used drugs or alcohol? (Mark only one for each substance)

	1-4 Times	5-9 Times	10-24 Times	25-49 Times	50 Times or More	Never
Alcoholic beverages	○	○	○	○	○	○
Marijuana/hashish	○	○	○	○	○	○
Heroin (smack, horse)	○	○	○	○	○	○
Cocaine (snow)	○	○	○	○	○	○
Uppers/stimulants (bennies, speed, amphetamines, etc.)	○	○	○	○	○	○
Downers/barbiturates/sedatives/tranquilizers (Valium, Quaaludes, etc.)	○	○	○	○	○	○
Other narcotics (opium, methadone, codeine, etc.)	○	○	○	○	○	○
Other drugs (LSD, angel dust/PCP, glue, etc.)	○	○	○	○	○	○

APPENDIX B

Part 3
Background

▶This part has general questions about you and your background. For each question, fill in one circle for your answer. Answer every question.

84 What were your grades in high school?
- ○ a. Mostly A's and B's
- ○ b. Mostly B's and C's
- ○ c. Mostly C's and D's
- ○ d. Mostly D's and below
- ○ e. Didn't attend high school

85 How much did you (or do you) like high school?
- ○ a. Didn't attend high school
- ○ b. Didn't like it
- ○ c. Didn't care much one way or the other
- ○ d. It was all right
- ○ e. Liked it a lot

86 How was (or is) your behavior in high school?
- ○ a. Never caused any trouble
- ○ b. Occasionally caused minor problems
- ○ c. Often caused problems
- ○ d. Was a real troublemaker
- ○ e. Didn't attend high school

87 How was (or is) your attendance in school?
- ○ a. Missed less than a day each year
- ○ b. Missed one to four days a year
- ○ c. Missed five to ten days a year
- ○ d. Missed 11 to 15 days a year
- ○ e. Missed more than 15 days a year

88 How do you rate your self-confidence?
- ○ a. Unsure of yourself a lot of the time
- ○ b. Confident of yourself about a few things
- ○ c. Confident of yourself about half of the time
- ○ d. Usually confident of yourself
- ○ e. Very confident of yourself in all things

89 How well do you do at most things you try?
- ○ a. You almost always succeed and do better than most people
- ○ b. You do most things as well as other people do
- ○ c. You usually get things done, but not as well as you want
- ○ d. You often try to do too much and have to give up
- ○ e. You don't try to do many things

90 If you are hired for this job, what do you think are your chances of becoming an excellent employee?
- ○ a. Certain to become excellent
- ○ b. Probably become excellent
- ○ c. Fifty/fifty chance to become excellent
- ○ d. Probably will not become excellent
- ○ e. Don't know

91 If you are hired for this job, how long do you think you will keep it?
- ○ a. A few weeks
- ○ b. 1 or 2 months
- ○ c. 3 or 4 months
- ○ d. 5 or 6 months
- ○ e. More than 6 months

92 Which kind of employee do you believe is *best*—one who:
- ○ a. Comes up with a lot of good ideas to improve the job
- ○ b. Is always friendly to others at work
- ○ c. Follows every company rule
- ○ d. Is hardly ever absent
- ○ e. Starts work without being told to

93 Which kind of employee do you believe is *poorest*—one who:
- ○ a. Refuses to work a fair share of overtime
- ○ b. Skips work and doesn't call in
- ○ c. Is a few minutes late almost every day
- ○ d. Takes home some small company property
- ○ e. Works much slower than others on the job

94 How many times in your life have you known someone who has taken something without permission (for example, from a car)?
- ○ a. Never
- ○ b. Once or twice
- ○ c. From 3 to 6 times
- ○ d. From 7 to 10 times
- ○ e. More than 10 times

95 How many times in your life have you had merchandise that was probably stolen?
- ○ a. Never
- ○ b. Once or twice
- ○ c. From 3 to 6 times
- ○ d. From 7 to 10 times
- ○ e. More than 10 times

96 How many times in your life have you gotten into physical fights?
- ○ a. Never
- ○ b. Once or twice
- ○ c. From 3 to 6 times
- ○ d. From 7 to 10 times
- ○ e. More than 10 times

97 How many times in your life have you been praised by your teachers or bosses?
- ○ a. Never
- ○ b. Once or twice
- ○ c. From 3 to 6 times
- ○ d. From 7 to 10 times
- ○ e. More than 10 times

PERSONNEL DECISIONS, INC.
Building Successful Organizations
[illegible]

"I've been in the program for two months and I've learned how to do my math a hell of a lot better and the computers have helped me with that.

-Sidney, Participant

LEARNING CAPABILITY ASSESSMENTS

Jane O. Cook, Ph.D.

Introduction

After careful research and consideration, three testing instruments have been selected for use in the Pre-Military Development Program in accordance to the guidelines as set forth in the Consulting Services Agreement.

The criteria listed in the Consulting Services Agreement included: 1) the determination of learning capabilities and limitations; 2) adult at-risk population; 3) diverse ethnic/racial groups. In addition, the consultant included the following criteria: 1) ease of administration; 2) ease of scoring; 3) time involved in both administration and scoring of test per individual; 4) availability of computer software for accuracy in scoring and interpretation of scores; 5) educational recommendations and/or integration of teaching methods based on results of test.

Testing instruments are discussed and listed in this report according to their rank, with the first one being the most desirable.

Learning Styles Inventory (LSI)

The Learning Styles Inventory (LSI), which measures the variables that affect learning, can be self-administered in twenty to thirty minutes. The results of this test can make it possible to maximize the effectiveness of the teaching-learning situation.

The LSI Form E requires only a fifth grade reading level, making it possible for the educationally disadvantaged to be given this test. The LSI was normed on 2500 students, with Form E using college norms, which would make it compatible to those persons who plan to take any college courses.

A microcomputer program may be purchased which administers, scores, and produces a complete report with educational recommendations. This would eliminate any testing or scoring error and give efficient results in a very short amount of time. Depending on the number of tests administered, it would cost between $4 and $5 per person for the software. In addition, use of software would reduce the amount of money spent on consultant's fees.

Even when software is used, only qualified persons according to the ethical standards of the American Psychological Association are eligible to purchase and administer this instrument.

The Differential Aptitude Tests

The Differential Aptitude Test battery contains eight tests that assess the abilities known to relate to performance in different occupations and to relate to an individual's ability to benefit from educational and occupational training. Any number or combination of tests in this battery may be administered, so the test actually can be tailored to the individual.

A computer version of this test is available to eliminate the possibility of test error in administration or scoring, as well as to expedite the interpretation of test results. Test results and the optional planning report are available immediately.

The computer automatically tailors the test to the individual, shortening administration time and eliminating any unnecessary testing.

A disadvantage to this computer software is that it requires some computer components which are not generally available on the average computer, unless a more expensive model is purchased.

The start-up software which is good for thirty-five test administrations costs $6.37 per usage. Additional disks which are good for thirty-five administrations cost $4.65 per usage. There is an examination kit available which has a demonstration disk to preview the application of this test.

Learning Efficiency Test

The Learning Efficiency Test is a quick and reliable measure of the visual and auditory memory of students aged six to seventeen years and above. It can be individually administered in ten to fifteen minutes which is a strong point in its use on a large scale with numerous individuals. Non-rhyming letters are used as stimulus items and are presented in sequences that range from two to nine letters. Raw scores are converted to standard score equivalents and percentile ranks with separate norms provided for each year age level which can be profiled on the Record Form.

The LET examines how efficiently and effectively a student processes and retains information presented through either the visual or auditory sensory modalities. Both the visual and auditory memory subtests measure three conditions: immediate recall, short term recall, and long term recall, with ordered and unordered scoring, thereby providing six scores for each of the two subtests.

In addition to its high predictive validity for classroom performance, it is useful in identifying individual students' preferred learning styles. The LET provides the diagnostician with a norm-referenced profile of a student's learning style, the amount of information the student is capable of recalling in an immediate memory task, the effects on short-term memory of an intervening verbal task containing non-essential information, and how well the student can transfer information from short-term memory to long-term memory.

The kit, which contains fifty Record Forms, Manual and Stimulus Cards is available at a cost of $50 for one kit or two or more kits at $47.50 each. A package of 25 record forms is priced at $9.75 for one package, two to nine packages at $8.90 each and ten or more packages at $8.15 each. Extra sets of Stimulus Cards cost $15 for one set or $13.90 each for two or more sets. Extra Manuals are available at $17.50 each.

Only qualified persons according to the ethical standards of the American Psychological Association are eligible to purchase and administer this instrument.

The Learning Efficiency Test is available through:

Western Psychological Services
Order Department
1203 Wilshire Blvd.
Los Angeles, California 90025
1 800 222-2670

or

Publishers Test Service
CTB/McGraw-Hill
2500 Garden Road
Monterey, California 93940
1 800 538-9547

Structure of Intellect Learning Abilities Test

The Structure of Intellect Learning Abilities Test is based on the multifactor model of intelligence developed by J. P. Guilford and provides a detailed assessment of strengths and weaknesses.

The test can be used for grades K-12 and adult levels. It can be individually or group administered in about two hours by classroom teachers, school psychologists, or psychometrists. A detailed profile of up to 26 factors of cognitive ability and creative thinking is produced and includes the following general abilities and combinations of them:

1. The Operations of Cognition, Memory, Evaluation, Convergent Production and Divergent Production
2. The Content Dimensions of Figural, Symbolic and Semantic
3. The Product Dimensions of Units, Classes, Relations, Systems, Transformations and Implications

The Standard test which utilizes all 26 subtests comes in two alternative forms, Forms A and B, and is used for grades two through twelve and adult. Since two forms are available, pre- and post-testing could be utilized. In addition, there are several forms which use a variety of subtests to assess specific areas and take about one hour each to administer. They are Form G for Gifted Screening; Form N for Mathematics and Form R for Reading which assess foundational abilities for academic achievement.

This test provides coordinated training and teaching interventions for each cognitive ability assessed. The 1985 comprehensive manual discusses the intervention programs as well as administration, scoring and interpretation.

The kit which contains five each of Forms A and B, one Manual, one set of Scoring Keys for all of the above mentioned forms, and one set of Stimulus Cards and ten Worksheet/Profiles is available at a cost of $125 for one kit or two or more kits at $117.50 each. A package of five Standard Test Booklets (either Form A or B) is available at $14.40 for one package; two to nine packages for $12 per package; or $9.90 each for ten or more packages. A package of five Test Booklets for Form M (Mathematics) or Form R (Reading) is available at a price of $13.50 for one package; two to nine packages at $11.25 each; ten or more packages at $10.10 each. Packages of extra Scoring Keys are available for a cost of $28.75 each for one set or $25.90 each for two or more sets. Extra Stimulus Cards are available at $41.50 for one set or $39.75 each for two or more sets. A pad of 100 Worksheets/Profiles for use with Form A and Form B to assist with the calculation of general ability scores and a profile to graphically illustrate the results is available at $13.50 for one pad; $12.00 each for two to nine pads; or $10.90 per pad for ten or more pads.

The Structure of Intellect Learning Abilities Test is available through:

Western Psychological Services
Order Department
1203 Wilshire Blvd.
Los Angeles, California
1 800 222-2670

Test of Nonverbal Intelligence

This is a standardized, language-free measure of cognitive ability for use with persons aged 5.0 to 85.11 years. It may be given individually or in small groups. It is untimed and requires about fifteen minutes to administer. There is no listening, speaking, reading, or writing required as the test taker merely points to the appropriate response. It was standardized on a nationally representative sample of approximately 2,000 persons. It may be used with normal persons as well as retarded, learning disabled and the deaf.

The test comes in two equivalent forms, Form A and Form B, each containing fifty items based on problem solving and presented in ascending order of difficulty. It yields percentile ranks as well as a TONI quotient with a mean of one hundred and a standard deviation of fifteen. The Manual presents correlations of TONI with various well-known measures of intelligence, aptitude and achievement. There are also discussions on the use of the scores for TONI and on the various kinds of normative information.

This test is especially useful in evaluating persons suspected of having difficulty reading, writing, speaking or listening, or those who are bilingual or non-English-speaking.

A kit containing one hundred Answer Sheets, fifty each of Form A and Form B; one reusable Picture Book; and one Manual is available at a cost of $98 for one kit or $96.50 each for two or more kits. Answer Sheets for either Form A or Form B come in packages of fifty and are available at $19.50 for one package, $18.35 each for two to nine packages, or $17.60 each for ten or more packages. Extra reusable Picture Books are available for $36.25 each or $35.40 each for two or more books. The Manual may be purchased separately for $28.50 or two or more for $27.65 each.

Only qualified persons according to the ethical standards of the American Psychological Association are eligible to purchase and administer this instrument.

The Test of Nonverbal Intelligence (TONI) is available through:

Western Psychological Services
Order Department
1203 Wilshire Blvd.
Los Angeles, California 90025
1 800 222-2670

or

Publishers Test Service
CTB/McGraw-Hill
2500 Garden Road
Monterey, California 93940
1 800 538-9547

Culture Fair Intelligence Test

This intelligence measure is not influenced by cultural background, scholastic or verbal training. According to the catalog, it is highly reliable and valid. This test is recommended for work with culturally and educationally deprived individuals. Scale Three is for use with persons aged fourteen through adult. It is available in two equivalent Forms, A and B, and it takes about fifteen minutes to administer.

The kit containing ten each of Forms A and B; one Scoring Stencil for use with the Answer Sheet; one pad of fifty Answer Sheets; and one Manual for Scale Three is available at a price of $34 for one kit or two or more kits at $31.50 each. Packages of twenty-five reusable Test Booklets are available for $13.50 per package, two to nine packages for $12.60 per package, or ten or more packages at $11.90 each. A Technical Supplement for Scales Two and Three is available at $9.10 for one or $8.75 each for two or more. A Scoring Stencil for use with the Answer Sheets is available at $4.50 for one or $3.90 each for two or more. A pad of fifty Answer Sheets may be purchased for $10.40; two to nine pads for $9.80 each; or ten or more pads for $8.45 each. Extra Manuals for Scales Two and Three may be purchased at a cost of $8.50 for one or $7.90 for two or more.

Only qualified persons according to the ethical standards of the American Psychological Association are eligible to purchase and administer this instrument.

The Culture Fair Intelligence Test is available through:

Western Psychological Services
Order Department
1203 Wilshire Blvd.
Los Angeles, California 90025
1 800 222-2670

Learning Styles Inventory (LSI)

People differ in the way they learn and not all aspects of those differences are related to mental ability. The Learning Styles Inventory measures the variables that affect learning, thereby making it possible to maximize the effectiveness of the teaching-learning situation.

The LSI consists of thirty items. The respondent ranks four given responses for each item in order of his or her preference or feelings. This is self-administered in twenty to thirty minutes, and it can be scored in just a few minutes.

The LSI assesses four major areas of the learner's preference for learning based on the following:

1. **Conditions for Learning**--The dynamics of the learning situation.

   Peer

   Organization

   Goal Setting

   Competition

   Instructor

   Detail

   Independence

   Authority

2. **Area of Interest**--Subject matter or objects of study.

   Numeric

   Qualitative

   Inanimate

   People

3. **Mode of Learning**--Modality through which learning is preferred.

   Listening

   Reading

   Iconic

   Direct Experience

4. **Expectation for Course Grade**--The level of anticipated performance.

A major feature of the LSI is that each student's Learner Typology is identified as one of the following:

Independent Learner

Independent Conceptual Learner

Socially Oriented Applied Experience Learner

Conceptually Oriented Learner

Socially Oriented Learner

Socially Oriented Conceptual Learner

Independent Applied Experience Learner

Applied Experience Learner

Neutral Learner

This Learner Typology, if used with the **Canfield Instructional Styles Inventory** Instructor Typology, can be highly useful in matching students with instructors.

The LSI was standardized on over 2500 students and is available in four forms--Forms A, B and C require a ninth grade reading level and Form E requires only a fifth grade reading level. Each Test Booklet is self-scoring and contains its own Profile Form: Form A's profile uses college norms; Form B's profile uses high school norms; Form C's profile uses junior high school norms and Form E's Profile uses college norms.

For a cost of $55 for one or $49.80 each for two or more, it is possible to purchase a kit containing two each of Forms A, B, C and E; one Manual; and two Computer Scannable Booklets. Inventory Booklets may be purchased in packages of ten: one package at $28.50, two to nine packages for $24.75 each, ten to forty-nine packages for $19.80 each, fifty to ninety-nine packages for $16.75 each, and one hundred or more packages at $14.50 each. Extra copies of the Manual may be purchased at $22.50 each or $19.85 each for two or more.

In addition a microcomputer program may be purchased which administers, scores and produces the same report as the mail-in Inventory Booklet. Hardware requirements are: IBM PC,XT,AT, or compatible, with 192K memory, 5-1/4" disk drive; DOS 1.1 or higher. Each disk is good for twenty-five uses, after which a new disk must be used. A User's Guide comes with each disk. The cost of one disk is $125; two to nine disks are $112.50 each; ten or more disks are $98.50 each.

Only qualified persons according to the ethical standards of the American Psychological Association are eligible to purchase and administer this instrument.

The Learning Styles Inventory (LSI) is available through:

Western Psychological Services
Order Department
1203 Wilshire Blvd.
Los Angeles, California 90025
1 800 222-2670

Wechsler Adult Intelligence Scale--Revised (WAIS-R)

An individually administered measure of a person's capacity for intelligent behavior, the Wechsler Adult Intelligence Scale--Revised is intended for use by trained clinical examiners as part of a cognitive assessment or general psychological or neuropsychological assessment. The WAIS-R is the most widely used and researched intelligence scale for adults. This is a test of global intelligence which includes a variety of tests which provide opportunities for a person to demonstrate intelligent behavior in many different ways. Each age and sex group of the national standardization sample was closely matched to the U. S. population for race, geographic region, and occupation, with additional controls for education and urban/rural residence. Verbal and Performance Tests are systematically alternated to help maintain the subject's interest. During the revision of the WAIS, items that were considered unfair to various subgroups of the population, obsolete, ambiguous, or technically unsuitable were modified or deleted. Equivalence studies with WAIS and WISC-R and retest (stability) studies at two ages groups are summarized in the revised manual.

Two scales, Verbal and Performance, can be administered separately or together. The Verbal Scale can be used alone with people who have visual or motor handicaps, while the Performance Scale can be used alone with people who cannot understand or manage language.

Verbal Tests	Performance Tests
Information	Picture Completion
Digit Span	Picture Arrangement
Vocabulary	Block Design
Arithmetic	Object Assembly
Comprehension	Digit-Symbol
Similarities	

Deviation IQs are provided for the Verbal Scale, the Performance Scale and the Full Scale.

This test is suitable for persons aged sixteen through seventy-four. It takes approximately seventy-five minutes to administer and it must be administered individually.

The Complete Set includes all necessary equipment, Manual, twenty-five Record Forms, twenty-five Supplementary Record Forms, and twenty-five Analysis Worksheet and Guides with Attache' Case. The cost of the Complete Set is $349. The WAIS-R Expanded Record Forms come in a package of twenty-five for $48 or a package or one hundred for $187. Additional WAIS-R Analysis Worksheet and Guides are available in a package of twenty-five for $25 or a package of one hundred for $95.

The WAIS-R Microcomputer-Assistance Interpretive Report is a computer program that produces in-depth analysis of WAIS-R results. This program generates a three to four page interpretive report based on accepted WAIS-R research. This program converts an individual's raw scores to scaled scores and IQs. It produces a report that includes confidence intervals for IQs, significance and prevalence of Verbal-Performance differences, significantly deviant subtest scores and percentile ranks. The accuracy of the program ensures error-free conversions. The WAIS-R Micro requires an IBM PC with at least 128K RAM, IBM PC DOS 2.0 (or above, one disk drive and compatible printer. This is a licensed software program, and specialists must sign a licensure agreement with The Psychological Corporation prior to shipment of materials. The WAIS-R Micro packages include a User's Manual and one computer disk. Each disk provides an unlimited number of reports. The cost of the WAIS-R Micro is $149 when purchased from Western Psychological Services. The Report Writer: WAIS-R is available for $295 from Psychological Assessment Resources, Inc.

Eligibility to purchase WAIS-R materials requires specific training and experience in a relevant area of assessment. Types of purchasers who qualify are as follows: 1)members of qualified professional organizations; and 2) individuals who qualify on the basis of professional licensure or certification. Other individuals who may qualify based upon their experience and educational background and/or are under the supervision of qualified professional must submit a Registration Form outlining their qualifications.

WAIS-R materials may be order through:

The Psychological Corporation
Order Service Center
P. O. Box 839954
San Antonio, Texas 78283-9955
1 800 228-0752

or

Psychological Assessment Resources, Inc.
P. O. Box 998
Odessa, Florida 33556
1 800 331-TEST

Wide Range Achievement Test--Revised (WRAT-R)

The wide Range Achievement Test--Revised can be given individually or in groups. It measures basic knowledge of reading (word recognition and pronunciation), written spelling, and arithmetic computation. The test can serve as an adjunct to intelligence and behavior adjustment tests by clinicians and educational

professionals. Test results can assist remedial educators in planning treatment programs. The test includes white/non-white item difficulty comparisons and item changes from the earlier edition. New Norms based on a random stratified sample utilize the Rasch methodology (also used in item analysis). Comparisons of item difficulty for WRAT-R items are presented for
white/non-white groups and metro/non-metro groups.

The three subtests (Spelling, Reading and Arithmetic) may be given in any convenient order, with portions of subtests administered individually or in small groups. Working time is about fifteen to thirty minutes. It is possible to retest with the same form in three months without significant practice effects.

The WRAT-R is hand scored following Manual guidelines that yield RAW Scores, Grade Equivalents, Standard Scores and Percentile Ranks.

One advantage of using the WRAT-R is that a Computerized Report Writer for Adult's Intellectual, Achievement and Neuropsychological Screening Tests is available through Western Psychological Services which is described below.

A Starter Set which includes Level One and Level Two Test Booklets, Manual and Reading/Spelling Cards is available at a cost of $58. Test Booklets come in a package of twenty-five for $15. An extra Manual costs $35. A Content Validity Monograph may be purchased for $4. Extra Reading/Spelling Cards are $14 each. In addition a Tape Cassette with Spelling Test dictations and Pronunciation Guides for reading tests may be purchased for $40.

The WRAT-R may be purchased by individuals who have completed an advanced level course in testing from an accredited college or university, or equivalent training under the direction of a qualified supervisor or consultant. Registration is required unless the purchaser is a member of a qualified professional organization or holds professional licensure or certification.

The WRAT-R is available through:

The Psychological Corporation
Order Service Center
P. O. Box 839954
San Antonio, Texas 78283-9955
1 800 228-0752

Computerized Report Writer For Adult's Intellectual, Achievement and Neuropsychological Screening Tests

This computer program produces a comprehensive psychoeducational evaluation ready to edit with word processing software to produce a finished report. Demographic data, standard test scores for one or more tests, and behavioral observations are entered, and the program will compile and integrate date from the information entered. The Report Writer disk provides interpretation for the following tests: Stanford-Binet Intelligence Scale, Fourth Edition; WAIS-R; WRAT-R; Kaufman Test of Educational Achievement; Woodcock-Johnson Achievement Tests; Benton Visual Retention Test; Aphasia Screening Tests; Stroop Color and Word Test; Symbol Digit Modalities Test; Purdue Pegboard Test; Trail-Making Test; Sing and Double Simultaneous Stimulation Test; Seashore Rhythm Test; and the Validity Screening Test. Hardware requirements: IBM PC, XT, AT, or an IBM compatible with 256K memory, MS-DOS 2.1 or later, and two disk drives. The price for this computer software is $550 for one or $525 each for two or more when purchased from Western Psychological Services. The cost is $495 when purchased from Psychological Assessment Resources, Inc.

This computer program is available through:

Western Psychological Services
Order Department
1203 Wilshire Blvd.
Los Angeles, California 90025
1 800 222-2670

or

Psychological Assessment Resources, Inc.
P. O. Box 998
Odessa, Florida 33556
1 800 331-TEST

The Differential Aptitude Tests

The Differential Aptitude Test battery contains eight tests that assess the abilities known to relate to performance in different occupations and to relate to an individual's ability to benefit from educational and occupational training: Verbal Reasoning, Numerical Ability, Abstract Reasoning, Mechanical Reasoning, Space Relations, Spelling, Language Usage and Clerical Speed and Accuracy. The eight tests included in the DAT battery can be administered together or individually. It is recommended that the entire battery be administered when test results will be used for vocational counseling.

A computer version of this test is available to eliminate the possibility of test error in administration or scoring, as well as expedite the interpretation of test results. Test results and optional planning report are available immediately. The computer automatically tailors the test to the individual, shortening administration time. This software was designed for test administrators and examinees with little or no computer experience.

The IBM Version runs on the IBM PC, IBM PC/XT, IBM PC/AT, and compatibles. The computer must have 256K memory, either two 5-1/4" or 3-1/2" floppy disk drives or one floppy and one hard disk drive, graphics-capable monitor, either a Hercules graphics card or a color graphics card, and IBM PC-DOS or MS-DOS Version 2.0 or higher.

An Examination Kit including Demonstration Disks One and Two; Guide to the Demonstration Software; Orientation Booklet; Score Report Folder; Sample Individual Report; and Product Summary is available for $40. A ten-use Start-Up Package including the above items plus items for testing ten examinees, and Disk Three (Disks Two and three are reusable) for a cost of $107. A thirty-five-use Start-Up Package with contents of ten-use package, except that it contains software for thirty-five test administrations, is available for $223. A ten-use Replenishment Package including Disk One may be purchased for $55. A thirty-five-use Replenishment Package including Disk One may be purchased for $163. Additional copies of Disks One and Two may be purchased for $22.50 each. A Technical Manual is available for $34, Administrator's Handbook for $13.50, Counselor's Manual for $14, and Counseling from Profiles, Second Edition for $16.

These materials are available to individuals who have obtained a Master's level degree from an accredited college or university, or are in the process of completing equivalent training under the direction of a qualified supervisor or consultant. Registration is required unless a member of a qualified professional organization or hold professional licensure or certification.

The Differential Aptitude Tests Computerized Adaptive Edition is available through:

The Psychological Corporation
Order Service Center
P. O. Box 839954
San Antonio, Texas 78283-9955
1 800 228-0752

Adult Basic Learning Examination, Second Edition

The Adult Basic Learning Examination, Second Edition (ABLE) is designed specifically for Adults and is useful for assessing adult achievement in the settings of career development, correctional or adult education and VOC-TECH programs. ABLE measures achievement levels as high as post high school and as low as first grade with test content that centers on adult life. ABLE comprehensively assesses basic skills in mathematics, reading and language arts.

ABLE was standardized with adults. Scaled Scores, Percentile Ranks, Stanines, and Grade Equivalents are given for Levels One, Two and Three. Two alternate and equivalent forms, E and F, are available at each level of ABLE. It can be administered either individually or in a group. The ABLE Screening Battery, an alternative to the full ABLE Battery, gives a quick estimate of an adult's level of learning and provides a useful measure of an adult's functional ability in reading and mathematics. The Screening Battery can be administered in about one hour, rather than the two to three hours it takes for the full battery.

SelectABLE, an easily administered, short locator test, helps place individuals in the most appropriate ABLE level to ensure more accurate ABLE results. It only takes about fifteen minutes to administer selectABLE on either hand-scorable or Ready-Score Answer Sheets. Ready-Score Answer Sheets simultaneously record and score examinee responses, providing immediate feedback and eliminating the need for scoring keys (Levels Two and Three only). Ready-Score Answer Sheets give information to help with instructional planning. Because objectives within each test are grouped on the scoring sheet, the scorer actually can see specific test objectives and score them separately without having to refer to an additional document or key. ABLE Computer-Scoring allows scanning and scoring by computer, saving time.

Level One is for adults with one to four years of formal education. It includes vocabulary, reading comprehension, spelling, number operations and problem solving tests. Most of the tests in Level One, designed for adults with limited reading skills, are dictated.

Level Two is for adults with at least eight years of schooling. It contains vocabulary, reading comprehension, spelling, number operations, and problem solving tests, plus a language test that assesses applied grammar, capitalization and punctuation.

Level Three is for adults with at least eight years of education and who may or may not have completed high school. It includes vocabulary, reading comprehension, spelling, number operations, problem solving and language tests.

Levels Two and Three can be self-administered; instructions to the examinee are simple, eliminating the need for an examiner to supervise the entire testing process. Levels Two and Three also can be administered simultaneously in a single classroom, eliminating the need for separate classrooms and additional examiners.

ABLE Computer Scoring allows the scorer to scan the answer documents on a Computer Systems Sentry 3000, Scantron 1400, 5200, or 9000 scanner, and all compatible full-page Scantron scanners; key raw scores btained from Ready-Score or hand-scorable answer sheets into the computer; or key answers directly into e computer. ABLE Computer Scoring can be used with any computer that is fully compatible with the IBM PC, XT, or AT, operating with IBM PC DOS 2.0 or above, 640K or RAM and a hard disk. ABLE Computer coring allows a choice of a variety of reports:

Individual: Individual Report, Record Label, Item Analysis

Instructor/Program/System: Summary Report, Master List, Master Summary

Subtotals and Isolated Group Reports: Summary, Summary Exceptions and Master List

Norm Group: ABE/GED, Prison, Vocational/Technical, Combined Group or Local

he ABLE Examination Kit including Level One, Two and Three Test Booklets, Directions for Administering ll levels, Group Record (Level Two), Hand-scorable Answer Sheet (Level Two), Ready-Score Answer Sheet (Level Two) and SelectABLE Ready-Score Answer Sheet may be purchased for $28.

electABLE, including Group Record and SelectABLE Handbook, and a package of twenty-five Ready-Score Answer Sheets (Form C) may be purchased for $32.50. SelectABLE with a package of fifty Hand-scorable Test Sheets (Form C), as well as Group Record and SelectABLE Handbook may be purchased for $28.

BLE Screening Battery Examination Kit including one Test Booklet, one Ready-Score Answer Document, one Machine-scorable Answer Document, and Directions for Administering may be purchased for $9. A ackage of twenty-five ABLE Screening Battery Test Booklets may be purchased for $31.50, and a package f twenty-five ABLE Screening Battery Ready-Score Answer Documents may be purchased for $26. Directions for Administering ABLE Screening Battery may be purchased for $5.

Hand-scorable or Reusable Test Booklets, including Directions for Administering, may be purchased in packages of twenty-five for $40.50. A package of twenty-five Ready-Score Answer Sheets, including one Group Record may be purchased for $34 per package (for Levels Two and Three only). A package of fifty Hand-scorable Answer Sheets, including two Group Records, may be purchased for $28 per package (for Levels Two and Three only).

Scoring Keys for SelectABLE are available for $17 each. Scoring Keys are available for each level at $35 each. Norms Booklets containing directions for scoring and lists of correct responses; information about the development of ABLE and the interpretation of scores; norms tables for both ABLE forms; descriptive information about the research; and the objectives assessed by the test must be ordered separately for each level at a cost of $20 each. A Handbook of Instructional Techniques and Materials containing adult-related instructional techniques and a list of supplementary materials for use in group or individualized adult instruction must be ordered separately for each level at a cost of $19 each. A Reading Supplement which complements the Handbook of Instructional Techniques and Materials and suggests teaching techniques must be ordered separately for each level at a cost of $6 each.

Additional copies of the SelectABLE Handbook may be purchased for $6. Directions for Administering ABLE may be ordered for $5 each (Level One is in one book and Levels Two and Three are in a separate book). Group Records are available for $3.50 each. A package of fifty ABLE Answer Folders costs $18 per package.

EST COPY AVAILABL

ABLE Machine-scorable Answer Sheets for use with Scantron Scanners come in a package of fifty for $30. Universal ID Sheets which are optional for Computer Scoring come in a package of thirty-five for $9.

ABLE Computer Scoring Software may be purchased for $750.

ABLE materials may be purchased by anyone with experience in administering standardized tests through:

The Psychological Corporation
Order Service Center
P. O. Box 839954
San Antonio, Texas 78283-9955
1 800 228-0752

Tests of Adult Basic Education Forms Five and Six (TABE)

The Tests of Adult Basic Education is appropriate to administer to people from high school through adult. It may be administered individually or in a group. The complete battery takes three hours, twenty minutes to administer, whereas the Survey Form takes one hour, forty minutes to administer. It is permissible to administer all seven subtests over a period of days, or selected subtests to gather particular information. In the Complete Battery, there are two equated forms of the test. Alternate forms give a valid way to measure growth over time.

The seven subtests of the TABE are based on teaching materials most commonly used by adult educators. Scores on the subtests, and on the objectives within them, give teachers a profile of each student's instructional strengths and needs in order for the teacher to provide a successful experience by building on the strengths rather than only concentrating on weaknesses.

The Locator Tests for reading and mathematics help place the test taker in the proper level of the TABE test to assure that persons are tested at the level where they can succeed, thus reducing frustration and the sense of failure. Practice Exercises also help to reduce fear and improve accuracy of testing by acquainting students with the test in a non-threatening manner.

The Practice Exercise and Locator Test for TABE should be administered prior testing with either the Complete Battery or Survey Form in order to determine which level will give the best measurement for an individual. This prevents giving a test where the person "tops out" or "bottoms out" so that the most reliable measurement and best profiling can be obtained. Separate tests are provided for reading and Mathematics because it has become evident that many adults have differing levels of skills in each area.

There are four kinds of answer sheets. SCOREZE Answer Sheets show the keyed responses inside a sealed paper and carbon paper "sandwich" for very simple scoring and easy profiling. Hand-Scorable Answer Sheets requiring Hand-Scoring Stencils allow more secure protection of the key and may be quicker to score than SCOREZE Answer Sheets in the case of large quantities. SCANTRON Option Two Answer Sheets are in two forms: SCANTRON stand-alone forms work with stand-alone scanners 08,88,888mp, 888p, 1000, 2100 and 5200s. NCS Answer Sheets are used with NCS tabletop (Sentry 3000) scanners. Computer-linked forms are in half-sheet layout for SCANTRON Scanner Models 1200, 1300, 1400, 2100, 2700, 5200 or 5200s, when linked with an IBM PC, PC-compatible and the TABE scoring software.

Scoring software allows quick, local scoring by microcomputer using IBM PC, XT or AT and compatibles with 128K memory, two disk drives and an 80 or 132-column printer. The TABE Subtest Norms Diskette calculates the grade equivalent scores, scale scores and desired percentile scores for each subtest. It allows the tester to print an Individual Subtest Report for each person as well as a Group Report. Each student's number of correct scores are entered at the keyboard after hand scoring the test.

A Specimen Set which includes Practice Exercise and Locator Test; one test book of the Survey Form and for each level of the Complete Battery, form 5; Complete Battery Examiner's Manual with Answer Key for all levels; a Complete Battery Hand-Scorable Answer Sheet; a SCOREZE Answer Sheet; SCANTRON Answer Sheets; Student Diagnostic Profile; and Test Reviewer's Guide may be purchased for $12.

Practice Exercise and Locator Test components may be purchased as follows:

Test Books (25)	18.75
SCOREZE Answer Sheets (25)	9.35
Hand-Scorable Answer Sheets (50)	9.50
SCANTRON Computer-Linked Answer Sheets (50)	9.50
SCANTRON Stand-Alone Answer Sheets (50)	9.50
Hand-Scoring Stencil (1)	7.75

Survey Form Components may be ordered as shown below:

**Test Books (25) with Examiner's Manual and Key	34.00
SCANTRON Computer-Linked Answer Sheets (50)	9.50
*SCANTRON Stand-Alone Answer Sheets (50)	9.50
NCS Answer Sheets (50)	9.50
**SCOREZE Answer Sheets (25)	12.00
Hand-Scorable Answer Sheets (50)	9.50
**Hand Scoring Stencil (1)	7.75
Examiner's Manual with Answer Key	6.00

Components for the Complete Battery are available as indicated below:

*Test Books (25) with Examiner's Manual and Key	34.00
*SCANTRON Computer-Linked Answer Sheets (50)	9.50
*SCANTRON Stand-Alone Answer Sheets (50)	9.50
*SCOREZE Answer Sheets (25)	12.00

Hand-Scorable Answer Sheets (50)	18.00
**Hand-Scoring Stencils (set of 3)	23.25
Examiner's Manual with Answer Key	6.00
Norms Book	6.00
Test Coordinator's Handbook	8.50
**Student Diagnostic Profile/Analysis (25)	5.30
Group Record Sheet	.80

**Necessary to order a different set for each Level.
*Necessary to order a different set for Reading, Mathematics, Language and Spelling.

Computer Software for IBM PC or IBM-Compatible which gives Subtest Norms and Objectives Performance is available for $588.

The TABE is available through:

Publishers Test Service
CTB/McGraw-Hill
2500 Garden Road
Monterey, California 93940
1 800 538-9547

Slosson Intelligence Test

The Slosson Intelligence Test (SIT) is a brief, individually administered test to determine the mental ability of persons of all ages through adult. It is administered verbally in ten to twenty minutes.

The SIT was adapted from skills and tasks in the Stanford-Binet, Form L-M, and the Gesell Developmental Schedules. It has a high correlation with the Wechsler Adult Intelligence Scale.

The Examiner's Manual has been revised to include data from current reliability and validity studies. It describes the purpose and construction of SIT, lists the test questions arranged chronologically by age, provides directions for administration and scoring, suggests ways of adapting the test to accommodate exceptional persons, explains how to interpret the results and includes a bibliography.

The SIT Score Sheets are in pads of fifty and provide a rapid determination of a person's mental ability. The score sheets also serve as a record form for an individual's educational or personnel file. Scores can be entered as IQ scores, percentile ranks, stanines or normal curve equivalents.

Current normative data are included in the Expanded Norms Tables. The SIT Technical Manual presents a compilation of reports of such of the vast research done with the widely used SIT. Validity and reliability data are provided.

The Slosson Oral Reading Test (SORT) is included in the SIT Kit. It is individually administered and yields a "comfortable" reading grade level. It gives a quick measure of reading ability and is useful in identifying reading handicaps. Directions for the administration and scoring of SORT are on each Score Sheet.

The SIT Computer Report provides a complete report and analysis of the Slosson Intelligence Test. It aids in making decisions regarding whether to evaluate further, in determining expected achievement, and in finding levels of ability and identifying basic areas of weakness. The SIT Computer Report includes a comprehensive manual in a vinyl binder, two diskettes, and twenty Input Data Sheets. The IBM-compatible software uses MS DOS.

The Test Kit, including the Examiner's Manual, Expanded Norms Tables, a pad of fifty SIT Score Sheets and a pad of fifty SORT Score Sheets is available for $48. A pad of fifty SIT Score Sheets and a pad of fifty SORT Score Sheets costs $10 for each pad. SIT Expanded Norms Tables cost $15, and the SIT Technical Manual costs $15. Test Record Answer Booklets cost $17.50 for a package of twenty. The SIT Computer Report Software may be purchased for $200.

The Slosson Intelligence Test is available through:

Publishers Test Service
CTB/McGraw-Hill
2500 Garden Road
Monterey, California
1 800 538-9547

Dr. Jane Cook is a practicing counseling psychologist and a certified psychometrist in Biloxi, Mississippi. She has extensive experience in teaching and conducting seminars in addition to her private practice.

> *"I have been here for almost a month and I have learned more than I have ever known. We get to work on computers to better educate ourselves for the military."*
>
> -Bryan, Participant

CERTIFICATION OF OPTIONS

Judith A. Alamprese

Introduction

A critical component of the Model for Pre-Military Development is the process that will be used to certify participants' completion of program requirements. In targeting men and women ages 17-30, who wish to enter the military but who have been rejected due to disqualifying scores on the ASVAB, the Pre-Military Development program will provide participants with instruction in basic skills, life coping and job keeping skills, personal health enhancement, values clarification, and responsibility training. Participants will be expected to demonstrate their mastery of knowledge and skills in each of these instructional areas, as well as complete college-level courses if appropriate. In addition to having to fulfill the program's course requirements, it is anticipated that participants without a high school diploma will be able to earn one while in the program by meeting the criteria of existing adult high school diploma programs.

The curriculum that will be taught in the Pre-Military Development program includes both academic knowledge and life skills, and will require that participants demonstrate their acquisition of these skills and knowledge through the use of varied assessment procedures. While traditional paper-and-pencil tests are appropriate for measuring participants' cognitive skills and knowledge, other types of assessments will be required for measuring their skills beyond the cognitive domain. Such skills, which include those related to job keeping, team problem-solving, and life coping, can best be measured through the use of applied performance assessments. This type of assessment procedure uses simulations of life tasks, observations of performance, and oral assessments to measure an individual's level of skill. Because of the Pre-Military Development program's varied skill requirements, a comprehensive certification process should include the use of paper-and-pencil as well as applied performance measures.

This paper describes options for certifying the knowledge and skills required by the Pre-Military Development program. The next section presents procedures for certifying participants' fulfillment of program requirements, including a discussion of the advantages and disadvantages of various testing processes. The final section presents two adult high school diploma certification processes that can be incorporated into the Pre-Military Development program.

Certification of Program Requirements

The Pre-Military Development program will require that participants achieve or accomplish the following:

1. Make a commitment to complete the course;

2. Achieve a certificate of completion certifying a high school equivalency;

3. Earn 15 hours of freshmen level college courses (non-remedial) for those participants with a General Educational Development (GED);

4. Participate in intensive life coping/work skills training;

5. Develop team skills and successfully live and work together in team settings; and

6. Develop leadership skills.

In undertaking these activities, each participant will progress at his or her own pace and will be expected to be a contributing member of a team consisting of 12 to 15 members. Further, each participant will have an Individual Education Plan that will guide his or her progress through the program.

Part of a participant's experiences in the program will include the assessment of the knowledge and skills he or she learns in the program. For many participants, testing or assessment will not be a positive part of their prior educational experiences. For example, many will not have earned their high school diplomas and all will have received disqualifying scores on the ASVAB. Participants' failure with these experiences may be due to deficient test-taking skills or their inability to perform successfully on timed tests. Because of the likelihood of participants' previous difficulty with testing, the Pre-Military Development program will utilize assessment procedures that maximize their ability to demonstrate their acquisition of the skills and knowledge required by the program.

The development of certification procedures for the program will involve the following three activities:

1. Specification of the competencies required for each segment of the curriculum;

2. Identification of existing appropriate paper and pencil or computer-aided assessment measures and the development of new measures; and

3. Development of applied performance measures.

Each of these activities is described below.

Specification of Competencies

A critical step in developing a certification process for a program is the identification of the competencies--i.e., skills, knowledge, and abilities--that will be required for successful completion of the program. In the Pre-Military Development program, participants will be required to demonstrate possession of the following skills, knowledge, and abilities:

1. Remedial basic skills (e.g., reading, mathematics, writing);

2. Life coping/work/job keeping skills;

3. Personal health information;

4. Leadership and team participation skills; and

5. College-level academic knowledge (non-remedial for participants with a GED).

The initial step in designing the certification process for the Pre-Military Development program is to develop a set of exit-level competencies and performance indicators for each of the five curriculum areas listed above.

The competencies should specify the outcomes that are expected of each participant, and will be used to guide the design of the certification (i.e., assessment) procedures. For example, in the area of remedial skills, the following exit-level competencies might be established:

1. Write - compose an original organized paragraph; or

2. Interpret charts and graphs and/or scale drawings (an example of a mathematics skill).

While the competencies state the specific skill or knowledge that is required, the performance indicators specify the level of skill or knowledge. For example, the performance indicator for the writing competency stated above would be the following:

Compose an original organized paragraph with;

at least four sentences,

the first word indented,

a main idea, two or more supporting details, and a conclusion, and

correct grammar, usage, capitalization, spelling, subject-verb agreement, verb tense, and punctuation.

The content that will be taught in the five curriculum areas will need to be examined and specific competencies and performance indicators developed for each area. While the first four areas concern basic and life skills, the fifth area is focused on the attainment of academic knowledge. The development of competencies will be a useful process regardless of the types of skills and knowledge addressed in the program, since the final outcomes required for program completion will be clear and the competencies will help determine the types of assessment measures that are appropriate.

Identification of Paper-and-Pencil Measures

Once the competencies and performance indicators for the five curriculum areas have been specified, the next step is to identify the types of testing or assessment procedures that will be used to certify participants' acquisition of skills and knowledge. The first type of testing procedure that will be considered is paper-and-pencil assessments. These assessments include standard objective tests such as multiple choice and supply-type questions (e.g., fill-ins), and non-standard computer-adaptive tests. They also include essay tests, written reports, and design problems (Priestly, 1982). Paper-and-pencil assessments are adequate for measuring cognitive skills and factual knowledge, and usually are the least expensive techniques to use in large-scale assessments because they can be administered to large groups and scored manually or by machine.

Computer-adaptive tests also utilize paper-and-pencil items, which are sequenced by computer and presented to the student. One feature of this type of assessment is the computer's ability to select items of specific levels of difficulty and present them in an order determined by the student's performance on previous items. This process is one whereby the computer customizes the test to each student by administering items that increase in difficulty until the student answers items incorrectly, then an easier item is administered. Item selection occurs spontaneously as the student takes the test. This approach is one that is frequently used in programmed learning contexts such as the military. The use of computer-adaptive testing in the public education system has been limited in the past by the high cost of computers, but may become more prevalent with the availability of inexpensive hardware (Priestly, 1982).

Paper-and-pencil assessments should be considered for certifying Pre-Military Development program participants' acquisition of skills and knowledge in two of the five curriculum areas: remedial basic skills and college-level academic knowledge. Both areas include the learning of cognitive skills and factual knowledge, and the use of paper-and-pencil measures is likely to be the most efficient assessment process for testing these skills and knowledge.

Two options are possible concerning the use of paper-and-pencil measures: 1) the adoption of existing tests, or 2) the development of new tests. The certification process for the Pre-Military Development program may include one or both of these options, depending on the types of competencies that are to be assessed and the availability of existing instruments to measure the competencies. Once the competencies in the two curriculum areas have been determined, a review of existing paper-and-pencil measures should be undertaken. These measures should be examined to determine their reliability, validity, and appropriateness for measuring the competencies. If no appropriate measures exist, or if there are measures for only a subset of the competencies, then new paper-and-pencil measures should be developed (the process for development of new measures is discussed later in this section).

Selection of Applied Performance Measures

Another type of assessment that will be considered for certifying the completion of requirements in the Pre-Military Development program is applied performance assessment. Performance assessment is the process of gathering data by systematic observations for making decisions about an individual (Berk, 1986). Such assessment measures include actual performance assessments, simulations, observational assessments, and oral assessments. Some paper-and pencil assessments are included under the category of applied performance measures. Generally, these measures assess a skill in the context in which it is used in daily life.

Actual performance assessments include those techniques that are administered in actual work or classroom settings, and which usually require actual performance of some kind. These tests provide the most realistic assessment of job-related competencies, but often are time-consuming and expensive to design, administer, and score. They may be used to test skills in the affective, cognitive, psychomotor, and perceptual domains.

Simulations are proxies for actual performance tests and are used in situations in which such tests are impractical because of their cost, danger, the serious consequences of mistakes, or the impossibility of arranging actual performance situations. These types of tests provide less direct measures of job-related skills and behaviors than actual performance tests, but are more direct than paper-and-pencil objective tests. In addition, simulations generally allow the assessor to control most of the variables in the testing situation, to standardize the test across students and situations, to present the test in a realistic context, and to measure on-the-job behaviors and skills. Simulated performance tests and written simulations are included in this category of applied performance assessments.

Observational assessments are used to score a student's performance in a controlled testing situation, as is the case when an assessor is watching the performance of someone who knows he or she is being watched and judged, or in a naturally occurring situation. In this circumstance, the individual usually is unaware that he or she is being observed for the purposes of evaluation. Observational assessments are useful for assessing performance or behaviors that require subjective judgments, and that cannot be measured adequately by other, more objective types of tests.

Oral assessments require some kind of oral response from the student, must be administered on an individual or small-group basis, and must be scored during the administration (unless the response is being taped). The types of assessment techniques included in this category are: interviews, oral examinations, and prepared presentations. Generally, the time and cost for using these techniques is relatively high and scoring is difficult to accomplish in a valid and reliable manner. However, oral assessments can be used to measure skills and behaviors, such as speaking skills, which cannot be measured adequately by other techniques (Priestly, 1982).

Applied performance assessments should be considered for certifying Pre-Military Development program participants' acquisition of skills and knowledge in three of the curriculum areas: life coping/work/job keeping skills; personal health information; and leadership and team participation skills. The skills in these areas are ones that cannot easily be assessed though a paper-and-pencil exercise, since an accurate assessment of a participant's attainment of the skills will most likely require his or her demonstration through an actual or simulated performance. For example, work related or job keeping skills such as one's ability to conduct a successful interview can best be measured through an actual performance assessment. A participant's ability to exert leadership skills could be measured through a simulation.

The process for determining the final assessment strategies for measuring the skills in the three curriculum areas should follow the procedures described previously. Once the competencies and performance indicators for each of the areas are identified, a determination needs to be made as to what are the most appropriate (in terms of face validity) and cost effective methods for assessing participants' attainment of each competency. In some instances, one or more applied assessment techniques may be applicable; in others, a paper-and-pencil test may be sufficient. The final choice of assessment techniques will be made to achieve a balance between cost and appropriateness.

Development of Measures, Documentation Procedures and Staff Training

The development of the Pre-Military Development program's certification system will require the design of new assessment measures (both paper-and-pencil and applied performance), as described previously. This design process should include the implementation of the following procedures:

1. Description of the assessment method for each competency that is to be certified;
2. Development of prototype items to illustrate the standards of the specification;
3. Development of guidelines for scoring each item in the assessments;
4. Specification of the content knowledge or skills that are to be assessed by items, such that the range of possible accurate responses is listed; and
5. Determination of equipment or resources that will be used in the assessment procedures;
6. Field test of assessment items; and
7. Revision of items based on the results of the field test.

In addition to the development of procedures for new assessment measures, consideration must be given to the design of the overall system for managing the certification process. Once the competencies, performance indicators, and assessment procedures have been specified, manuals need to be prepared that document all of the above information. These manuals will become the operational documents for implementing the certification procedures.

The criteria for selecting staff and the development of a staff training program also need to be considered. Staff who administer the certification progress should possess, at a minimum, a bachelor's degree. They also should be able to demonstrate the competencies required by the program.

A staff training program should be developed in which program staff can receive both initial and ongoing training in the conduct of the assessment processes. This training should include instruction in the administration and scoring of assessment items, as well as a process for assuring reliability among staff in their use of the assessment procedures. The establishment of an ongoing monitoring system is particularly critical when certification procedures involve the use of applied performance assessments. Such a system will help to assure the implementation of a high quality assessment and certification system.

High School Diploma Certification Programs

The final section of this paper describes two options that can be used by the Pre-Military Development program for awarding participants a high school diploma. The first is the External High School Diploma Program, a competency-based alternative high school diploma program that was validated by the U.S. Office of Education's Joint Dissemination Review Panel and has been disseminated nationally since 1979 (see Alamprese, 1979, Appendix A). Originally developed by the Syracuse Research Corporation (Syracuse, New York) with funding from the New York State Education Department, this program was conceived as an alternative to the GED that assesses the basic and life skills needed by adults to function successfully in society. The program uses a variety of applied performance measures to assess 64 generalized life skill competencies and an individualized competency in one of three areas: occupational skills, academic skills, or individualized skills such as artistic ability. The list of the 64 life skill competencies and their performance indicators are presented in Appendix A.

This program is an assessment process that does not include direct instruction. Rather, adults wishing to earn a high school diploma enter the program and participate in a diagnostic process in which their strengths and weaknesses in the program's competencies are assessed. Once an adult's weaknesses have been identified, he or she is advised to participate in remedial instruction. Upon completing this process, the adult returns to the program and enters the final assessment phase in which he or she is given the opportunity to demonstrate the required 64 generalized life skill competencies and an individualized competency. Upon 100 percent demonstration of the competencies, the adult is awarded a regular high school diploma by the school district or state in which the program is operating.

The External High School Diploma would be an appropriate option for inclusion in the Pre-Military Development program because its content (e.g., basic skills; life coping/work/job keeping skills; and personal health information) match that which will be taught in the Pre-Military program. Also, the applied performance assessment methodology utilized in the External Diploma Program will complement the assessment procedures that are proposed for the Pre-Military program. Pre-Military program participants would be able to work on both program's requirements simultaneously. The External Diploma Program currently is being disseminated by the American Council on Education in Washington, D.C.

The second option for high school certification is the Adult High School Credit Diploma Program that was developed by the Connecticut Department of Education (see Appendix B for an overview of the program). Participants in this program are awarded a regular high school diploma for their completion of 20 adult education credits. These credits are earned by completing courses in English, Mathematics, Social Studies, Science, and Vocational/Art, as well as electives. The electives can include independent study projects or the receipt of credit for experiential learning.

The Adult Credit Diploma Program includes both procedures for assigning credit and an instructional component that covers academic subjects as well as life skills. The program, which is available from the Connecticut Department of Education, Bureau of Adult Education, could be adapted for use in the Pre-Military Development program by revising the credit requirements to match those that are operational in the state of Mississippi.

Summary

This paper has described procedures for establishing a certification process for documenting Pre-Military Development program participants' attainment of the skills and knowledge required by the program. The certification process includes the specification of competencies for each of the content areas addressed by the program, as well as the use of state-of-the-art assessment techniques to certify participants' skills. In addition, two options are presented for incorporating an adult high school diploma credentialing process into the Pre-Military Development program. The inclusion of such a process will help to ensure that program participants earn a high school diploma as part of their program experience.

Ms. Judy Alamprese is currently Director, Education and Training Groups at Cosmos Corporation in Washington, D.C. She directed the research, development and operation of the External High School Diploma Program, a competency-based assessment system for adults. Ms. Alamprese has worked in the area of program evaluation and policy development.

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Appendix A

EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM COMPETENCIES AND DESCRIPTION

LIST OF GENERALIZED LIFE SKILLS MINIMUM COMPETENCIES

NEW YORK STATE EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM

NEW YORK STATE EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM
GENERALIZED LIFE SKILLS MINIMUM COMPETENCIES

COMPETENCIES	PERFORMANCE INDICATORS
I. Communication The candidate will be able to:	
1. Read	1.1 Identify the following elements from a factual newspaper or magazine article: a) main idea; b) supporting details; c) stated conclusion; d) inference(s).
	1.2 Identify appropriate information from other written materials such as leases, warranties, maps, classified ads, and/or sets of directions.

2. Listen	2.1 Identify, given a taped presentation:
	a) main idea;
	b) supporting detail(s);
	c) stated conclusion;
	d) inference(s);
	e) fact and opinion.

	2.2 Identify and describe elements of inflection and bias used to manipulate the listener, given a taped presentation.
3. View	3.1 Identify and describe elements used to affect the viewer, given visual stimuli.
	3.2 Identify elements of non-verbal communication, given visual stimuli.
	3.3 State inference(s) deduced from viewing captionless materials.
4. Write	4.1 Compose an original organized written paragraph with: a) at least four sentences; b) the first word indented; c) a main idea, two or more items of supporting detail, and a conclusion; d) correct grammar, usage, capitalization, spelling, subject-verb agreement, verb tense, and punctuation.
	4.2 Write sequential instructions consisting of at least five steps to achieve a stated goal.

COMPETENCIES	PERFORMANCE INDICATORS
I. Communication, cont.	
5. Speak	5.1 Describe orally a selection identified by the Assessment Specialist.
II. Computation	
The candidate will be able to:	
1. Compute whole numbers	1.1 Add whole numbers with a maximum of four addends.
	1.2 Subtract whole numbers.
	1.3 Multiply whole numbers using three digits by two digits.
	1.4 Divide: a) using a one-digit divisor and round off answer; b) using a two-digit divisor, especially 10, 12 or 52, and round off answer.
2. Compute decimals	2.1 Add decimals using at maximum four addends, some of which may be whole numbers.
	2.2 Subtract decimals, one of which may be a whole number.
	2.3 Multiply decimals using at maximum three digit decimal by two digit whole number factors.
	2.4 Divide a decimal by a whole number using: a) a one-digit divisor; b) a two-digit divisor, especially 10, 12 or 52.
3. Compute percentages	3.1 Compute to the nearest whole number, the percent being between 1 and 99, especially 1.5%, 7%, or 12%. Round off answers.
4. Compute and approximate area	4.1 Compute area of a rectangle.
	4.2 Compute area of two adjacent rectangles.

COMPETENCIES	PERFORMANCE INDICATORS
II. Computation, cont.	
5. Compute and estimate dollars and cents	5.1 Add, subtract, multiply, and divide numbers represented by dollars and cents. Round off answers.
	5.2 Estimate cost of a group of items.
6. Interpret charts and graphs and/or scale drawings	6.1 Draw a conclusion consistent with data presented, given a graph (bar, broken line, circle) or a scale drawing.
7. Make gross estimates (comparisons) from graphic representations using fractions and percentages	7.1 Compare fractions (1/2, 1/3, 2/3, 1/4, 3/4) and percentages (5%, 25%, 33%, 50%, 75%, 99%, 100%) to graphic representations that depict them.
III. Self-Awareness	
A. Decision-Making	
1. Apply decision-making process	1.1 Solve a problem, given a set of circumstances, with the following steps: a) define problem; b) state three alternative solutions; c) state advantages and/or disadvantages of each alternative solution; d) choose and defend one solution.
2. Identify own values and goals	2.1 List or state one personal goal and a personal value.
3. Identify own roles	3.1 Name and describe own role in a family, the community, and in an occupation.
4. Identify own needs	4.1 List or state one example of a physical need and one example of an emotional need.
	4.2 Give an example of personal conflict due to differing needs and/or goals.
B. Aesthetic Expression and Response	
1. Describe awareness of art in everyday living.	1.1 Describe an item in relation to the following and why it is or is not pleasing: a) color; b) shape; c) design or pattern; d) material; e) use.

COMPETENCIES	PERFORMANCE INDICATORS
III. Self-Awareness, cont.	
2. React to or create an exhibit in an art gallery, museum, or similar exhibition	2.1 List or state two reactions to item(s) viewed or created.
3. React to a live performance (i.e., concert, theatre, or musical theatre)	3.1 Attend or participate in a live performance and: a) present proof of attendance or participation; b) describe the performance in terms of costumes, lighting, special effects, music, and performers; c) describe parts of the performance enjoyed most or least and explain why.
4. Identify the uses of music to manipulate emotions	4.1 Identify and describe an example of music used to generate or manipulate emotion, given a prepared tape.
C. Health and Safety	
1. Exercise responsibilities for own health and that of family	1.1 Describe or perform first aid techniques in cases of: a) shock; b) bleeding; c) stopped breathing; d) burns; e) poisoning; f) fractures; g) choking.
	1.2 Identify and state or list ways to eliminate home hazards, given a checklist, particularly: a) falls; b) fires; c) electrical accidents; d) poisonings.
	1.3 Identify medications that are kept in the home by listing or stating: a) the information contained on a prescription medicine label; b) the information contained on a non-prescription medicine label; c) two safety measures for use and storage of medicines.

COMPETENCIES	PERFORMANCE INDICATORS
III. Self-Awareness, cont.	
	1.4 State or list the five facts that must be included in an emergency telephone report: a) name the emergency and request help; b) give own name and spell it; c) give phone number; d) give location of emergency; e) hang up phone last.
	1.5 Identify methods of family planning by stating or listing: a) the names of three methods; b) one advantage and one disadvantage for each method.
	1.6 Identify the relationship between nutrition and disease by stating or listing: a) one food from each of the four basic food groups; b) the essential nutrients found in food.
	1.7 State or list conditions or diseases that might result from poor nutrition.
	1.8 State or list ways to prevent the spread of disease through food and water.
2. Identify negative effects of major health threats	2.1 State or list one negative physical and one negative psychological effect of one of the following on the individual: a) stress; b) anxiety; c) depression.
	2.2 State or list one negative physical effect of one of the following on an individual: a) cigarettes; b) alcohol; c) drugs.
	2.3 State or list two local resources that offer assistance for major health threats.

COMPETENCIES	PERFORMANCE INDICATORS
III. Self-Awareness, cont.	
3. State preventative techniques, symptoms, and causes of major disease	3.1 State or list: a) five of the warning signs of cancer; b) one step in the early detection of cancer.
	3.2 State or list: a) three warning signs of heart attack; b) three ways to lower the risk of heart attack; c) one way to aid a heart-attack victim.
	3.3 State or list causes, symptoms, and treatment of gonorrhea and syphilis.
IV. Social Awareness	
The candidate will be able to:	
1. Collect information on community resources	1.1 Collect the following information on a legal, a social/recreational, and an educational community resource: a) name and address of resource; b) service offered; c) phone number.
	1.2 Collect the following information on a cultural/arts resource: a) name and address of resource; b) service offered; c) phone number.
	1.3 Collect the following information on an emergency and a medical service: a) name and address of resource; b) service offered; c) phone number.
2. Compare community resources	2.1 Compare two community resources that offer similar services on the basis of the following information: a) physical location; b) service offered; c) cost; d) hours service is available.

COMPETENCIES	PERFORMANCE INDICATORS
IV. Social Awareness	
3. Use community resources	3.1 Report on the use of a community resource selected on the basis of interest or need by: a) explaining service offered by resource; b) evaluating services used.
	3.2 Present proof of use of a community resource by presenting one of the following types of documentation: a) membership card; b) bill for services; c) copy of records; d) signed confirmation of attendance or participation; e) photographs, movies or slides; f) tape recording; g) other similar evidence.
4. Locate geographical places/ names on a map	4.1 Locate (by pointing out on a map) places currently cited in mass media (national/ international, cities/countries).
	4.2 Locate (by pointing out on a map) local places of interest.
5. Estimate time and distance	5.1 Estimate and record time and distance from a stated location to one of following: a) work; b) a community resource; c) a social or cultural resource; d) a hospital/fire department/police station; e) other appropriate categories.
6. State contributions of different cultures to American life	6.1 List or state the name of one contribution from two different cultures in the following categories: a) dress; b) food; c) arts; d) government; e) religion; f) occupations; g) values; h) other appropriate categories.

COMPETENCIES	PERFORMANCE INDICATORS
IV. Social Awareness, cont.	
7. Use history (past events) in making decisions and/or plans	7.1 State one decision, experience, or event in the past and describe how it has affected a current personal decision.
	7.2 State one decision, experience or event in the past and how it has affected a current public decision.
8. Exercise rights and responsibilities of citizenship	8.1 Present proof of participation in the process of government by documenting one of the following: a) voting in most recent election, primary, or referendum; b) petition to government; c) political campaign involvement (minimal involvement allowed); d) observation of a governing body in session (local, state, or national); e) letter to a local, state, or national official about a policy issue; f) jury duty participation; g) other appropriate participation.
	8.2 Identify representatives at local, state, and national levels of government.
	8.3 State or list one circumstance under which a given civil right may be exercised or jeopardized as reported in a news article.
	8.4 State or list an individual's rights concerning: a) arrest; b) questioning or search.
	8.5 State or list how to obtain counsel and when it is appropriate.
9. Function within a group	9.1 Participate in a group. State how an individual's behavior can affect a group.
10. State the effects of one group on another group	10.1 State how one group of people who are formally organized affect another group of formally organized people.

COMPETENCIES	PERFORMANCE INDICATORS
V. Consumer Awareness	
The candidate will be able to:	
1. Apply decision-making process (to comparative shopping)	1.1 Use decision-making process in comparative shopping to purchase goods and/or services.
2. Obtain and list sources of consumer information	2.1 List two sources of consumer information for the same product.
3. Distinguish between fact and opinion in everyday consumer practices	3.1 Identify a fact and an opinion from reading a magazine ad or newspaper ad.
4. Initiate the process for registering a consumer complaint regarding goods and/or services	4.1 Initiate a consumer complaint by filling out complaint form or by writing a complaint letter.
5. Identify and compare sources of consumer credit in making a purchase decision	5.1 Identify and compare two sources of consumer credit by listing: a) two sources of credit to finance the the purchase; b) rate or amount of annual interest from each credit source; c) collateral necessary; d) down payment demanded; e) time limit on loan and penalty for late payment.
VI. Scientific Awareness	
The candidate will be able to:	
1. Read scale on standard measuring device	1.1 Read the measurement on three of the following: a) a ruler (English or metric units); b) thermometer (Fahrenheit or Celsius scale); c) liquid or dry measuring cup (English or metric units); d) oral themometer (Fahrenheit scale); e) weight scale (English or metric units).
2. Solve simple equations	2.1 Apply simple formulae.
3. Convert measurements	3.1 Make simple unit conversions of measurement within English units.

COMPETENCIES	PERFORMANCE INDICATORS
VI. Scientific Awareness, cont.	
4. Classify information	4.1 Group items by some common denominator, such as cost, color, size, physical characteristics, location, services offered, observations, conclusions.
5. State the relationship between the individual and the environment	5.1 State or list one specific way an individual can negatively affect his/her environment, and how s/he can eliminate this.
	5.2 State or list one way the environment negatively affects an individual, and discuss measures an individual can take to control this.
VII. Occupational Preparedness The candidate will be able to:	
1. Identify own vocational interests and aptitudes	1.1 Complete Self-Directed Search (Holland) or Occupational Profile.
	1.2 State or list three occupations related to vocational interests and aptitudes, using SDS or Occupational Profile.
2. Locate and classify information about job choices in local community	2.1 List names, addresses, and telephone numbers of two public or private sources for job information.
	2.2 Classify jobs from a newspaper according to career fields.
3. Compare various occupations	3.1 Compare two similar jobs by reporting the following information: a) salary; b) benefits; c) previously acquired skills, knowledge, experience; d) other factors.
4. Identify characteristics of a good worker	4.1 Complete self-rating on work skills checklist and state why five characteristics are important for a specific job.

COMPETENCIES	PERFORMANCE INDICATORS
VII. Occupational Preparedness, cont.	
5. Prepare portfolio for job application	5.1 Select one appropriate job through classified job ads and complete the following: a) state or list four questions about the job that can be asked in an inquiry (personal or telephone): b) develop a resumé: c) write a letter of application for the job; d) fill out an application form.
6. Define payroll deduction terms	6.1 Point out on a payroll stub: a) gross pay; b) federal withholding tax; c) Social Security; d) State withholding tax; e) health insurance; f) retirement; g) union dues; h) net pay; i) other contributions.

NEW YORK STATE EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM

Submission Prepared for the Joint Dissemination Review Panel

United States Office of Education
National Institute of Education

Program Validated on May 30, 1979

Prepared By

Judith Alamprese, Director
External Diploma Program

PROGRAM AREA: Competency Based Adult Education, External High School Diploma Program

I. Project Title, Location: New York State External High School Diploma Program, Syracuse, New York

II. Developed by: External High School Diploma Assessment Staff, Regional Learning Service, a division of the Syracuse Research Corporation (SRC). The Syracuse Research Corporation is an independent not-for-profit research organization chartered by the Education Department of the University of the State of New York.

III. Source and Level of Funding:

A. Development, field testing, and implementation period: Initial award of $73,351 in 1972 from the Ford Foundation, and subsequent awards (1973 to date) from the Division of Continuing Education of the New York State Education Department. Federal Adult Education funds (PL91-230, Sect. 309) received from 1973 to 1978 for development, field testing, implementation, training, and evaluation: $849,360.

B. Continued implementation, refinement, training, and evaluation in 1978 to 1979. Federal Adult Education funds (PL91-230, Sect. 309) received from Division of Continuing Education, New York State Education Department: $171,268.

IV. Program Development and Field Testing:

The External Diploma Program (EDP) began with a grant from the Ford Foundation in 1972. Under this grant a 30-member design group of administrators, teachers, counselors, students, businessmen, and labor leaders from a five-county area in Central New York, led by the SRC staff, designed seven generic areas of competence and developed guidelines for the program.

In September 1973, with New York State Education Department special project funds, the SRC staff joined with a 14 person development group of Central New York secondary and post-secondary educators to identify the 64 generalized competencies and to begin to create an assessment system.

During 1973 to 1976 the program was developed and field tested in Syracuse. In 1976 the State Education Department funded five assessment sites across New York State to replicate the External Diploma Program as it was modeled in Syracuse.

During 1978 to 1979 the program is being offered in six locations throughout New York State and program development, evaluation, training, and assessment are being performed by the SRC staff in Syracuse.

V. Brief Description of the Program:

A. What is the New York State External High School Diploma Program? The External Diploma Program is an alternative high school credentialing program for adults who have acquired skills through their life experience and can demonstrate these skills in applied performance tests. Its objective is to provide adults with an assessment and credentialing process that is an alternative to traditional diploma programs such as the GED (General Educational Development). The assumption behind this program is that adults, through their life experiences, learn skills in a variety of traditional and non-traditional ways. To validate these skills it was necessary to develop a reliable and valid assessment process. In keeping with the program philosophy which maintains that assessment of competencies is most valid when the test environment is as close to reality as possible, the program was developed to enable adults to demonstrate their competencies through simulated adult life experiences.

To earn a high school diploma in the EDP an adult must demonstrate with 100% accuracy 64 generalized competencies that pertain to daily life experiences (known as life skills) and a competency in a particular job, talent, or academic area (known as an individualized competency).

The 64 generalized competencies are included in the following seven generic areas of competence: communication, computation, self-awareness, social awareness, consumer awareness, scientific awareness, and occupational preparedness. Some examples of competencies are: write a resume, state the contributions made by different cultures to American life, compare sources of consumer credit in making a purchase decision, and locate and classify information about job choices in the local community. The individualized competency may be in one of three skill areas: occupational, advanced academic, and special skill. Some examples of occupational skillsare carpentry and clerk typist; an example of a special skill is photography.

This program has two phases: diagnosis (pre-test) and final assessment.

1. Diagnostic phase (pre-test): In the first phase the adult takes six diagnostic tests (instruments) which identify learning deficiencies that could prevent the adult from demonstrating the 64 life skill competencies and the individualized competency. These tests also help the adult to understand the program requirements. Once the diagnostic tests have been taken the program advisor explains the results to the adult.

If the adult is deficient in math, reading, or writing the advisor prescribes the learning that is necessary for the adult to master these skills. The advisor also identifies the places in the community where the adult can go to obtain the necessary learning. Such places include the adult basic education program, a private tutor, or friends and family.

Although the advisor provides the adult with information about learning resources the adult must contact the resource and make arrangements for the learning experience. When the adult believes the deficiencies are overcome, he/she takes a retest. Retesting is not necessary for competencies other than the basic skills of math, reading,and writing. If the retest is not satisfactory another learning prescription is given and the process is repeated.

2. Final Assessment:

a. 64 Competencies: Once the adult has satisfactorily completed the six diagnostic tests, he/she enters the assessment phase and works with an assessment specialist.

The adult is assessed in the 64 competencies through an open testing technique. This technique consists of applied performance tasks incorporating different situational modes. Three tasks are take-home projects and two are oral interviews. After the adult has completed each of the three take-home projects, he/she is given a test at the office by the assessor on key competencies from each of the projects. All of the tasks require an explicit understanding of the competencies to be demonstrated and continuous feedback is given to the adult as he/she completes each task. During a period of what is called the Post-Task Assessment an adult can demonstrate any of the generalized competencies that he/she did not demonstrate during assessment. The Post-Task Assessment continues until the adult has demonstrated, with 100% accuracy,all required competencies.

b. Individualized Competency: In this phase the adult is required to demonstrate an occupational skill, an advanced academic skill, or a specialized skill in a talent,hobby or interest area.

1) Occupational skill. An adult can demonstrate his/her skill in this area by having his/her employer verify that he/she has worked satisfactorily at the same job for at least one year. If the adult has worked less than one year a performance assessment of his/her skill is made by someone from the community who is experienced in that particular occupation.

OR

2) Advanced academic skill. An adult demonstrates his/her skill in this area by presenting a portfolio containing acceptable evidence of his/her

ability to do college-level work. One example is obtaining acceptable scores on two standardized tests. This assessment was developed in conjunction with the admissions directors from the Central New York area colleges.

OR

3) Special skills. An adult can demonstrate his/her skill in this area in a performance assessment conducted by a person from the community who is an expert in that skill.

When the 64 generalized competencies and the individualized competency have been demonstrated and the work has been verified by another assessment specialist, the adult is awarded a regular high school diploma that is granted by a local school board.

B. Intended Beneficiaries: The External Diploma Program is designed to serve adults from a variety of backgrounds who have not taken advantage of other credentialing programs. Data collected on program participants reflect this diversity. Of the 1300 adults who were enrolled in the program from October 1974 through June 1978, 66% were women and 34% were men. Before entering the program the range of the last grade that they had completed was 8 to 12. Their median income was in the category of $8,000 to $15,000 a year (Source: Registration Forms). External Diploma program participants do not differ in sex distribution and prior education from participants in other credentialing programs such as the GED (data on average income are not available for GED participants).

Since the External Diploma program was designed to serve the adult population, it is necessary to document the projected need for such a program. The 1970 census figures showed that there were 5,344,393 adults residing in New York State who lack a high school diploma. In addition, approximately 25 percent of high school classes drop out each year before graduation. Since the average age of the population has been increasing it is likely that in the coming years the majority of adults without a high school diploma will be adults in the age category of 35 to 65.

C. Claims of Effectiveness: The following claims are made for the New York State External High School Diploma Program:

- The External Diploma Program has an older population of adult participants than does the GED program.
- The External Diploma Program is a reliable assessment system.
- The External Diploma Program is a valid assessment system.
- The External Diploma Program is more successful in retaining program participants than is the GED program.
- The External Diploma Program assists adults in identifying their deficiencies in basic skills so that they can obtain remedial help in order to demonstrate the life-skill competencies necessary for graduation.
- Program graduates, initially deficient, demonstrate an increase in basic skill competencies.

D. Costs: Table 1 presents the average costs of an External Diploma Program graduate. The costs were derived from the information provided by the six external diploma assessment sites that are operating across New York State. Some donated space and materials are reflected in these figures.

The installation costs ($486) reflect the cost for a program graduate during the first year of program operation, including staff training and material costs. Recurring costs are $450 a year.

It costs on the average $2500 per year to educate a student in the secondary school system in New York State. This is five times more than the average $450 cost per graduate in the External Diploma Program.

Adults enter the External Diploma Program at the 10th grade level and complete the program is less than one year's time. The average cost, then, is $450 for the External Diploma Program as compared to $5000 for 11th and 12th grade regular high school completion.

TABLE 6: AVERAGE COST INFORMATION PER GRADUATE

	Installation (Non-recurring costs)	Subsequent Years (Recurring Costs)
Staff	$330	$330
Staff Training	33	-
Facilities	33	33
Equipment and Materials	30	15
Consumables	25	29
Other Costs		
Staff Transportation	7	9
Public Relations	2	2
Graduation	-	2
Total	$464	$430

E. Interpretability of the Measures: Data collection included survey data from a follow-up questionnaire of graduates, data from program records, and standardized tests. The sources of data are described after each piece of evidence given for the claims of effectiveness.

The standardized tests that were used are the "Degrees of Reading Power" test and the R/EAL (Reading/Everyday Activity in Life). The standards for the "Degrees of Reading Power", the New York State Regents Competency reading comprehension test, are presented in The Regents Competency Testing Program: Information Brochure. Statistical estimates of reliability and validity for the R/EAL are found in the R/EAL Examiner's Manual.

F. Credibility of Evidence: The research design involved data from program participants and graduates from the six External Diploma assessment centers across New York State and a group of adults from the Syracuse area who had not received their high school diplomas. When available, data were presented from other high school level credentialing programs. The range of data utilized strengthens the evidence that the effects claimed are educationally meaningful.

The program was developed in Syracuse, New York a community with a diversified population. This provided the opportunity for the demonstration of the program in a not-for-profit career and educational counseling agency, the Regional Learning Service, which is a division of the Syracuse Research Corporation. This is one of the first non-school based programs in the field of adult education in New York State.

For further field testing of the program, in 1976 the State Education Department funded five assessment sites across the state to determine whether the program was appropriate for a broad range of the population. The five sites, opened in February 1977, are located in Elmira, Ogdensburg, Troy, Ossining, and Elmont, Long Island. Since three of the sites were located in school districts and two in BOCES, the field test also provided information on the viability of various administrative models. The Syracuse External Diploma staff trained and evaluated the staff of the five assessment sites and has continued to model the program and refine the process and materials based on the statewide field test findings.

The field test experience has proved successful. Between March 1975 and April 1979, 1900 persons received high school diplomas through this program.

Of these, 436 persons graduated from the Syracuse Center, while the five assessment sites have graduated a total of 1464 persons. As of April 1979 over 1500 persons are earning their diplomas through this program.

The data utilized from program records were collected initially by the trained staff at each of the assessment sites, and then analyzed by Judith Alamprese, Director of Refinement and Evaluation for the External Diploma Program. The follow-up survey was administered to statewide graduates by Ms. Alamprese in Syracuse. Dr. Paul Johnson, a consultant from Syracuse University, assisted in the analysis of the data. The State Education Department's Bureau of Educational Testing analyzed that data from the "Degrees of Reading Power" test. Data presented on other credentialing programs were obtained from State Education Department reports.

V. Evidence of Effectiveness:

A. Evidence of Reliable, Meaningful Effects

Claim 1: The External Diploma Program has an older population of adult participants than does the GED program.

The age distribution of the External Diploma participants reflects a significantly older population than is served by the GED (see Table 2). Inspection of Table 2 reveals that 59% of the External Diploma participants are over age 35 while 75% of the GED participants are under 35. The modal age category for the External Diploma participants is 36-50, while the modal category for GED participants is 18-21. This evidence indicates that the External Diploma program is highly successful in serving older adults.

TABLE 2: Age Profile of External Diploma Program Graduates and GED Program Participants*

Category	External Diploma	GED
	Percent	Percent
Age Group		
18-21	5.5	34.4
22-25	9.0	16.0
26-35	26.0	25.1
36-50	38.6	19.5
50-over	20.9	5.0
Number	(1290)	(10,355)

$\chi^2 = 969.54 \quad p < .001$

*Data presented for External Diploma Program include information on statewide graduates as of July 1978.
Data presented for GED program include information on participants from the state exclusive of New York City for the 1975-76 school year.

Claim 2: The External Diploma Program is a reliable assessment system.

The Crombach coefficient alpha was computed to determine the internal consistency reliability of the 64 generalized competencies. Results of the reliability analysis indicated a coefficient alpha of .82, suggesting that the 64 competencies were homogeneous or representative of a single trait of basic adult life skills.

In the External Diploma program trained assessment specialists evaluate evidence presented by program participants in order to certify their demonstration of the 64 generalized competencies. The evaluation criteria are explicity stated in a series of program manuals that have been continually updated as the program has expanded and have been approved by the State Education Department.

Inter-rater reliability of competency evaluations for statewide assessment specialists was established for the funding periods 1976-77, 1977-78, and 1978-79 (see Table 3).

The evaluation staff from the Syracuse center visited each of the assessment centers during the spring of each funding period. A random sample of the program participants' portfolios, which contain the evidence presented for the demonstration of all competencies, was selected at each assessment site. The work of each assessment specialist at each site was represented in this group of portfolios. The Syracuse staff independently evaluated a selection of competencies from 79 participants' portfolios. A standardized evaluation form was used for this process. Through this procedure an independent assessment of the generalized competencies was made by two raters.

A total of 3360 participant responses was rated for the three funding periods. An average agreement of 89.6% was established among the assessment specialists. The decreased percent agreement during the third period can be attributed to staff turnover, a normal occurrence in state-funded programs. These data give evidence that the possibility of assessment specialist bias in evaluating the demonstration of competencies is minimal and that there is inter-rater reliability among the assessment specialists in the evaluation of the generalized competencies.

TABLE 3: Three Year Comparison of Inter-Rater Reliability

	1976-77	1977-78	1978-79	Total
Percent Agreement	94.2	90.22	84.43	89.62
Number of Assessors	13	14	11	38
Number of Competencies Evaluated	2288	883	189	3360
Number of Program Participants Evaluated	26	39	14	79

Claim 3: The External Diploma assessment system is valid.

To ensure content validity in the development of the External Diploma assessment system, the SRC staff took as one of its initial tasks the design of the seven generic areas of competence and a representative selection of competencies to measure each of these areas.

The 30-member design group that met in 1972 formulated the model for the External Diploma program that emphasized two categories: Generalized Competencies and Individualized Competencies.

After the program model had been outlined and the general areas of competence had been identified, the task force of 14 developers was assembled to name the generalized competencies. The 14 persons who were selected had a knowledge of the secondary level curricula, prior teaching or work experience with adult learners, a broad life experience, and the ability and prior experience in writing behavioral objectives. This group, which met for seven sessions for a total of 38 hours, drafted a set of competencies, which were then sent for review to a group of persons representing small businesses, industry, unions, school personnel and social agencies. A total of 38 persons from this group attended two meetings and submitted their written comments and the ratings of the competencies to the developers for refinement of the competencies.

Using the feedback from the developers and reaction group the SRC staff refined and rewrote a second version of the competencies. A final draft of the competencies was then amended and approved by the Regional Committee for the External Diploma, which acted as a "school board" for the diploma program. This 17-member committee, consisting of representatives from local school districts, labor and industry, advised the SRC staff and, with the State Education Department, monitored the development of the assessment system. The Regional Committee reached unanimous agreement that the 64 competencies were representative of the domain of life skills that an adult needs to function successfully in his/her life. The list of 64 competencies was submitted to the State Education Department for approval for use during the developmental phase of the diploma program.

Claim 4: The External Diploma Program is more successful in retaining program participants than is the GED program.

The External Diploma process has proved to be an effective alternative because the retention rate has remained high in comparison with that of the GED. *For the period from July 1977 through June 1978 the average retention rate for the six External Diploma assessment centers was 73.4% (Base N = 3969) compared with a rate of 45.6% (Base N = 11,902) for the GED program participants for the school year 1975-76* (the GED data include statewide participants excluding the New York City area). Using a chi square test, this difference was statistically significant at the .001 level.

The 26.6% dropout rate for the External Diploma Program was based on those program participants who had not been engaged actively in either the diagnostic or the assessment phase for a period of at least six months.

These data on program retention indicate that the External Diploma assessment process maintains the initial interest and motivation of adult participants to a greater degree than does the GED program. (Data sources: External Diploma Center Final Reports; *Evaluation of the State Funded High School Equivalency Preparation Program*: 1975-76 School Year).

Claim 5: The External Diploma program assists adults in identifying their deficiencies in basic skills so that they can obtain remedial help in order to demonstrate the life skill competencies necessary for graduation.

It is claimed that through participation in the External Diploma program the basic skill deficiencies of the participants are identified so that they can obtain the necessary learning to demonstrate the required competencies. To demonstrate the effectiveness of the diploma program, subjects without a high school diploma from the Syracuse area were asked to participate, on an experimental basis, in part of the final assessment phase of the program. Eighteen adults (six males and twelve females) who matched recent External Diploma program graduates in age, sex, race, and prior level of education were selected from a group who responded. The External Diploma graduates were selected on the basis of the similarity of their demographic characteristics to control subjects.

These subjects, who had no prior experience with the External Diploma Program, were asked to complete two tasks from the final assessment phase of the program. The two tasks, which together measured 19 competencies, were selected because they included competencies from each of the seven basic and life skill areas. The tasks were administered to the control subjects under the same conditions as they had been administered to the program participants. The performance of the control group was compared with their matched pairs from the program graduates.

A t-test was used to compare the mean number of competencies demonstrated by experimental and control subjects. The results presented in Table 4 show that *adults who had gone through the diagnostic and final assessment phases performed significantly better than a demographically similar group of adults who had participated in just the final assessment phase dealing with the demonstration of the generalized competencies*. This evidence indicates that the structure of the External Diploma program is successful in enabling an adult to receive a high school diploma.

TABLE 4: Demonstrated Competency Results for Experimental and Control Groups

		Number of Demonstrated Competencies		
	N	Mean	SD	t - test of difference between E-and C-group means
E-group	18	13.6	2.75	3.69*
C-group	18	10.5	3.29	

*Statistically significant at .01 level

Claim 6: Program graduates, initially deficient, demonstrate an increase in basic skill competencies.

External Diploma program participants are diagnosed in their basic skills (reading, math, and writing) when they enter the program. The R/EAL is used to diagnose reading. Three forms of the Math Diagnostic Instrument, developed by the SRC staff with three local secondary level math instructors, are used to test math. The Writing Diagnostic Instrument, developed by the SRC staff with six secondary level English teachers, is used to ascertain ability to write a paragraph.

If this pretesting reveals deficiencies, participants are directed to the community to utilize the available learning resources, such as adult basic eduction centers and private tutors, so that they can obtain the necessary learning to pass a retest in the basic skills.

Of the 428 adults who received diplomas from the Syracuse assessment center from March 1975 through March 1979, 69% had to pursue some type of learning activity and pass a retest in at least one of the three instruments before they entered the final assessment phase. Presented in Table 5 is the distribution of graduates who required retests in any number of the three diagnostic areas. Further, the percent of graduates who retested in each of the areas was as follows: 40.8% in math, 27.3% in reading, and 38% in writing. Thus the data show that a substantial portion of the Syracuse center graduates increased their basic skill competencies as a result of participating in the total assessment process of the External Diploma program.

TABLE 5: Percent of Graduates Requiring Retesting in Diagnostic Phases of External Diploma Program

Number of Retests	Percent
No retests required	31.3
Retest required in one area	39.0
Retests required in two areas	21.5
Retests required in three areas	8.2
TOTAL	100.0
Number	(428)

A measure of reading mastery was established through the administration of the New York State Regents Competency Test, the "Degrees of Reading Power", to statewide External Diploma program participants.

The "Degrees of Reading Power", a reading comprehension test, is designed to measure the understanding of meaning within individual sentences and the ability to derive meaning from related prose text with many sentences. The standard of mastery that has been set for the test is the same as the level of difficulty of textbooks used by high school students.

The test was administered at the six assessment centers across New York State by the assessment specialist to each External Diploma participant who had completed the External Diploma Program between October 1978 and February 1979. A total of 131 persons completed the test. Of those who took the test, 91% reached the standard of reading comprehension that has been set by the Regents of the University of the State of New York.

Follow-Up Evidence

In order to determine the effect that participation in the program has had on the graduates with regard to further educational experiences, occupational mobility and self-esteem, a follow-up questionnaire, containing both closed and open items, is sent to program graduates approximately 10 months after diplomas are awarded. Table 6 shows a selection of responses from the 387 graduate questionnaires that were returned as of June 1978 (representing a response rate of 60%).

The results indicate that graduates are taking steps to further their education after receiving their diplomas and that the desire for more education is frequently job-related. Graduates report overwhelmingly an increase in self-esteem and indicate that their basic and life skills have increased as a result of participating in the program.

The qualitative data collected in the follow-up study dramaticall portray the positive effects that participation in the program has had on the graduates. Typical responses to the question "What was the best part of the program?" include: "the tasks were enjoyable and I experienced real life situations;" "being at home and doing it at my leisure;" "the encouragement that I got from everyone."

These data present a preliminary overview of the program effects. It is postulated that these effects will be more dramatic after a longer period of time has elapsed from when the graduates have completed the program. It is not possible to compare these results with results of participation in the GED and other credentialing programs since other programs do not collect similar data.

TABLE 6: Selection of Responses From Follow-Up Study of External Diploma Program Graduates

Graduate Responses to Questions About Effects of Earning a Diploma	Percent	Base N
Learning-Related Activities		
Since earning a diploma:		
Have taken educational courses	56.9	377
Received financial support from employer for course	20.2	94
Received aid or scholarship for course	25.5	94
Are interested in continuing their learning	78.6	364
For personal enjoyment	17.2	262
For self improvement and personal growth	17.6	262
For future career and business interests	52.1	262
Job-Related Activities		
Since earning a diploma:		
Are working at the same place	77.1	236
Received a change in job title	22.0	182
Reported a raise in salary	32.7	182
Effects on Self-Concept		
Reported that earning a diploma has brought increased personal satisfaction	99.7	360
Reported an increase in confidence to undertake new challenges as a result of earning a diploma	94.6	359
Reported feeling more positive about their skills and abilities as a result of earning a diploma	82.3	357
Improvement of Skills		
As a result of participating in the diploma program graduates report improvement of skills in the following areas:		
Math skills	76.7	363
Reading skills	76.0	363
Writing and grammar	81.9	363
Health knowledge	90.7	363
Occupational knowledge	77.6	362
Consumer practices	86.3	366
Use of community resources	84.7	367

B. Generalizability: The External Diploma Program has been replicated effectively in five sites in New York State and in the states of Wisconsin and Maryland. Presented in Table 7 are key characteristics of the External Diploma field test sites. The Table illustrates the variation in community type and population served. Many educators, both within and outside of New York State, have given their strong support to the concept and practice of the program and have encouraged its development. Former New York State Commissioner of Education Dr. Ewald B. Nyquist, a pioneer in the development of external programs, gave the address at the first graduation ceremonies for the External Diploma Program. At that occasion he emphasized the importance of having alternatives such as the External Diploma program available to adults of all ages. Regent Emlyn Griffith, in his address at the Syracuse graduation ceremonies in 1977, expressed his hope that the "program can be made available to adults across New York State." In discussing the role that the program has had in Wisconsin, State Adult Basic Education Supervisor Charlotte Martin affirmed her support of the program and her "particular interest in how much the program means to the graduates."

Local communities have given strong support to the program. Eight school boards in New York State, two boards in Wisconsin, and one in Maryland have agreed to award a local high school diploma to adults who successfully complete the program.

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The New York State Education Department has given its full backing by funding the program for a period of six years. The Department is now supporting a bill that has been introduced into the New York State legislature to provide funds for the statewide expansion of this program. In addition, the amended Adult Education Act has changed the purposes of the program to give priority to three functions, which this program addresses.

A key factor in the success of the replication has been the training that precedes program implementation. All of the criteria for program administration and for the evaluation of the required competencies have been set forth explicitly in a series of program manuals. An intense training session is required before the program can be implemented. To ensure that the program standards are universally implemented, the SRC and State Education Department staffs regularly monitor the performance of staff at each assessment site.

TABLE 7 Summary of Characteristics of External Diploma Field Test Sites

Name of Site	Area Served	Community Type	Dominant Characteristics of Population Served
Central New York: Syracuse	Onondaga, Cortland, Cayuga, Oswego, and Madison Counties	urban, suburban, rural	ethnically heterogeneous population
Ogdensburg, N.Y.	St. Lawrence and Lewis Counties	rural	predominately rural; widely dispersed population
Elmira, N.Y.	Chemung County	small town, rural	economically depressed, high unemployment
Elmont, Long Island	Nassau and Suffolk Counties	urban, suburban	suburban area, densely populated, outside of a major metropolitan area
Troy, N.Y.	Columbia and Rensselaer Counties	urban, suburban, rural	economically depressed
Ossining, N.Y.	Westchester County	urban, suburban	ethnically heterogeneous population

C. Attribution of Effects: Since adults voluntarily choose to participate in the External Diploma program, the fact that a substantial number have been able to increase their basic skills in order to satisfy the requirements for program completion is evidence of program success.

Follow-up data on GED participants are not available so that the effects of the External Diploma program cannot be compared with the traditional adult education system. No other data from non-traditional programs exists for comparison.

Dissemination: The training program, including manuals, is disseminated by the External Diploma staff at the Syracuse Research Corporation. The manuals, necessary for program replication, describe the External Diploma process and implementation. They have been prepared by the SRC staff and have been approved by the State Education Department. These manuals are: Generalized Assessment Competency Evaluation Manual, Diagnostic Manual, Manual of Generalized Assessment Materials, Record-Keeping Manual, and Individualized Competencies Assessment Manual.

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Appendix B

Overview of the Adult High School Diploma Program

ADULT HIGH SCHOOL CREDIT DIPLOMA PROGRAM (AHS-CDP)

THE PROGRAM

BASIC COMPONENT:
A prescribed plan to earn a required number of academic and elective credits.

PREVIOUSLY EARNED CREDITS TRANSFERRABLE?
Yes, all credits earned prior to program entry may be transferred.

PAST LIFE SKILLS EXPERIENCES APPLICABLE?
Yes, through documentation or demonstration as outlined in the Individualized Diploma Program (IDP), a component of the Adult High School Credit Diploma Program.

ENTRY LEVEL ASSESSMENT USED:

a) Transripts of prior earned credits.
b) Review of prior experiential learning.
c) CAPP Level Exit Tests.
d) Additional testing for class entrance is a local option.
e) Level D TABE Reading Test used for entrance into the Competency-Based Curriculum Packets which are an IDP option.

THE STUDENT

ENTRY AGE/RESTRICTIONS:
Is at least 16 years old, does not hold a high school diploma, and is no longer officially enrolled in high school.

APPROPRIATE ENTRY LEVEL SKILLS/TYPE OF STUDENT:

a) Skills on at least a high school entry level (CAPP Exit Level 233).
b) Especially appropriate for persons who need only a few credits.
c) Also beneficial for persons with experiential learning.

THE INSTRUCTION

TYPE OFFERED:

a) Basic academic and elective classes with a minimum of 48 hours of instruction per adult credit.
b) Optional IDP tutor assisted Competency-Based Curriculum Packets.
c) Preparation for documentation/demonstration of experiential learning.

STUDENT TIME COMMITMENT:
Varies depending on student background, needs, and the number of options offered by program.

TYPE OF TEACHER CERTIFICATION NEEDED:
Teachers must be certified in the area they are teaching in addition to Adult Education Certification #106.

THE DIPLOMA

REQUIREMENTS:
Minimum of 20 Adult Education Credits must be earned: 4 English, 3 Math, 3 Social Studies (including 1 U.S./American History), 2 Science, 1 Vocational/Art, 7 Electives.

AWARDED BY:
Local Board of Education.

ANY FEE?
No.

11/90 B.Novak/J.R.Harrison

"I am going to tell my friend about this program when I get home. It has helped me with my weakness. I like it so much that I haven't missed home."

-Neal, Participant

LEARNING MODULES RECOMMENDATIONS

Jorie Philippi

Background And Rationale

The University of Mississippi has been funded by the State Occupational information Coordinating Committee to provide a model plan for pre-military development. The University recognized the similarity between desired mental, moral and medical qualifications for both military and university student recruits. By working in partnership with the military, the University foresees mutually beneficial results for both institutions along with support for regional economic growth for states who would sponsor the proposed model program. Simply stated, the University model calls for the establishment of a residential Center for Pre-Military Development for students who wish to enter the military, but were rejected due to initially non-qualifying scores on the Armed Services Vocational Aptitude Battery (ASVAB). The program is designed for participants who are between the ages of 17 and 30; referral is by military recruiters. The mission of such a center is to provide individualized remedial instruction, living and working skills, personal health enhancement, values clarification, responsibility training and fifteen hours of freshman college level work. The program focus is to be workplace literacy.

Published program goals state that participants will progress at their own pace to:

- make a commitment to complete the course
- earn a high school equivalency certificate, if needed
- earn 15 hours of freshman level college credit
- participate in intensive living/working skills training
- develop team skills and successfully live and work together as a team
- develop leadership goals

On April 15, 1990, the University of Mississippi opened a program pilot center for the Mississippi Army National Guard on the Mississippi Gulf Coast College campus at Perkinston, Mississippi. Funded by monies from the State of Mississippi JTPA, by September of last year the center boasted an enrollment of 40 participants. Classes have been designed for only 12 to 15 participants, so that each student may receive individual attention and become a "contributing member" of the group.

In an effort to select the most effective curriculum materials to enable participants to achieve the program's goals, the University of Mississippi commissioned Performance Plus Learning Consultants, Inc. (PPLC) to study available resources and recommend appropriate materials. The information that follows is a description of the activities undertaken and the results of that study.

Study Activities

The following activities were conducted to gather information about project operations, participants and the appropriateness of available materials in order to formulate suggestions for instructional materials to be used in conjunction with the Pre-Military Development Program model:

1. On October 7, 1990, PPLC Principal Investigator, Jorie Philippi, met with the Project Director, Dr. Jane Borne, and key project personnel to discuss the goals and current status of the pilot program. Program staff reported that the participants were enthusiastic and that over the summer numbers of enrollees had far exceeded initial predictions. They noted that the current numbers of participants was somewhat lower (33), which was ascribed to the cyclical nature of program activities and the fact that it was an interim period between groups (or "classes") of enrollees. Arrangements also were made for visiting the residential pilot program to observe classes and interview program instructors and administrators at the site.

2. On October 8, 1990, Jorie Philippi, accompanied by a key project staff member, visited the pilot program center on the campus of Mississippi Gulf Coast College at Perkinston, Mississippi. After touring center facilities, program site administrator Lin Harper was interviewed. She outlined the academic portion of program operations, noting that there were three instructors: two full-time instructors for Reading/Communications and Life Coping Skills, and one half-time instructor for Mathematics. The Life Coping Skills instructor also serves as a tutor in reading and mathematics and is the facilitator for the Plato lab. Tutoring in all three subjects was also available to participants, along with access to computer-delivered instruction on the Plato system through the mainframe at the University of Mississippi. Ms. Harper expressed a preference for computer-assisted instruction, but described dissatisfaction with the on-loan Josten's system being piloted with learners due to numerous inadequacies. These included the lack of in-depth comprehension instruction, the childlike characters, slow response of programs to learner input, the time required to work through the materials, the minimal technical support from the company and the approximate $100,000 cost to be assumed if the project decided to adopt the system for use beyond the initial free demonstration period. Ms. Harper explained that other systems for delivering computer-assisted instruction were being explored, including the original military version of the U.S. Army's Job Skills Enhancement Program (JSEP) available on the Plato system.

   Ms. Harper stated that the paper-pencil instructional materials currently in use at the center were a collection of adult basic education texts, many from the Steck-Vaughn Publishing Company, as well as a variety of GED preparation books and the ARCO and Barron's ASVAB Study Guides. Participants are pre and posttested with the Test of Adult Basic Education (TABE). According to Ms. Harper, participants' pretest scores range from low second grade to upper tenth grade levels, with the majority of scores falling in the seventh to ninth grade range. The average reading grade level scaled score was reported to be 8.4; the exact average math score was unknown, but estimated to be slightly lower, at "about 7.5".

   Because of the range of participant entry-level abilities, a learning lab setting is being piloted as a major portion of instruction. Ms. Harper praised the professional competency of the instructors and their ability to facilitate learning in such a setting. She pointed out the importance of allowing instructors the freedom to choose and customize materials as their individual learning programs for participants. She recommended that instructors be given a menu of materials to select from or to create along with guidelines for the appropriate focus of content and instructional techniques.

3. Following the meeting with Ms. Harper, Jorie Philippi conducted interviews with each of the instructors to determine the type of instructional activities and materials they were currently using

and/or alternative materials they would recommend for use with the program. The math instructor reported that he used teacher-made materials as the major source of math instruction. He described these as focusing on "scaled-down skills geared to passing the ASVAB and GED as needed." According to the math instructor, an analysis of the ARCO ASVAB Guidebook reveals that the prep tests primarily contain items that test ability with percents, decimals and fractions. Because he has only 30 classroom days with participants, who average 20 days of attendance, he has only 40 - 50 hours of instructional contact time to assist learners with passing the ASVAB. He reported that a score of 31 is required for entrance into the National Guard and a score of 50 for full-time military duty. In this amount of realistically available instructional time for preparing learners to pass the ASVAB, he is unable to address higher math skills, such as algebra, which also appear on the ASVAB test. Since the required passing scores can be obtained without correct responses to the items requiring higher math skills, the instructor spends about eighty percent of instructional contact hours working to improve learners' skills with percents, decimals and fractions, plus a small amount of instructional time with geometry skills. The instructor estimates that only ten percent or less of participants need remedial work (provided through tutoring) in whole number operations.

The reading/communications instructor and the life coping skills instructor who tutors in the areas of basic skills both reported that they prefer to create a variety of individual learner plans and utilize teacher-made materials (worksheets) along with specific exercises from commercially available books for instruction. They reported that they "try to challenge everyone at some point of instruction." They estimate participant abilities in reading and communication to range from 5th to 10th grade levels. Writing tasks were reported to be the most difficult for learners, many of whom are operating at an estimated 5th grade level and "can barely put sentences together." Grammar exercises were cited as particularly difficult lessons for learners to master. Traditional adult education texts are being used during the pilot program. These were instructor favorites (reportedly preferred because they had previously been used successfully in instruction, the instructors were familiar with them and felt comfortable using them, and they were available for use at the center). They included:

504 Absolutely Essential Vocabulary Words (vocabulary exercises)

Miliken, Building Comprehension, Levels 7-8-9 (stories followed by questions)

Steck-Vaugh, Champions of Change (biographies)

Holt Reinhart Winston (1980) The Reading Activities Handbook

Ansco, English Alive

Hayes School Publishing Company, Secondary Literature Series

Ansco (1951), Reading Comprehension

Educational Insights, Reading for Comprehension Series (packs of instructional cards), "Noting Details" and "Using Context Clues"

Instructors reported that for reading instruction they usually read a story or passage aloud in class, then directed learners to work independently and write answers to reading skill questions accompanying the story. This was followed by a whole group review of learners' answers. One instructor also mentioned using duplicated copies of pages from isolated lessons in the U.S. Army Basic Skills Education Program Reading Anthology and Exercise Modules (BSEP); she said that participants seemed to especially enjoy these "military-oriented" reading lessons because they "looked like the kinds of materials the learners expected to be using in their [military] service jobs."

Because the date of the on-site visit was the observation of a State holiday, Columbus Day, classes were operating on a limited basis to accomodate ad hoc cafeteria schedules for the participants in residence. For this reason, it was necessary to give instructor interviews priority over classroom observations and participant interviews during the minimal amount of time available for on-site visit activities. Several classes were observed briefly in math and life coping skills. General impressions were of students working with the above-mentioned materials in situations as instructors had described them, i.e., traditional instructional delivery divided between whole group instruction and independent work on exercises.

4. PPLC investigator Jorie Philippi spent approximately 2 hours working through lessons in math, reading and writing on the available demonstration computer equipment system, Josten's Invest. Each terminal is equipped with a keyboard, a mouse and headset. System access to particular subject skill lessons are only available at certain times of the day, which limits the scheduling of participants to terminals. Results confirmed the comments made earlier in the visit by Ms. Harper, the project site administrator, and by the instructors. The music, cartoon characters and large print are not suitable for adult learners. In addition, individual lessons put learners into a program loop that cannot be exited without completing the entire lesson. Explanations of math skills, while colorful and graphically appealing, are often not complete; the same is true for reading skills, although the characters (e.g., "Zelda the Zoo-Keeper") are inappropriate for adult learners. Many of the reading screens contained multiple choice answer options to questions for which there are more than one correct response; however, the system only recognizes the authors' preselected response as correct, which is frustrating to an adult learner. The writing program works on the same premise as a spell checker or grammar checker. The lessons themselves do little to explain why certain rules and conveyances are used in standard English; rather it presents opportunities for high-risk learner situations in which learners author passages about topics, then have the passages scanned and "marked" by the computer for as many technical areas as the instructor or learner sets from the menu.

5. On October 10, Jorie Philippi met with U.S. Army Mississippi National Guard Major Elton Berry in Jackson, Mississippi, to discuss the pilot program at the center and the Guard's perspective on the type of basic skills curriculum that would best provide skills required by guardsmen for competent performance of job tasks. Major Berry reported that the Mississippi National Guard has skill application requirements very similar to those of the regular U.S. Army. He referenced the recent purchase by the Mississippi National Guard of the U.S. Army's European-based Basic Skills Education Program (BSEP) reading texts and future plans to purchase math texts from the same system. These texts are currently being adopted for use by enlistees around the world (EFFORT Program) and provide instruction in basic skills through the vehicle of military materials via a functional context approach. The benefits of such a combined content-skills approach is that the specific applications of skills required for use with military materials and military job tasks are demonstrated and practice is provided in these applications for the learners. Because these applications for military job contexts differ from traditional skill applications used in an academic contexts, these texts shorten the period of time needed for effective skill mastery and are motivational for students because they illustrate specific situations in which the skills taught will be required for use.

   Major Berry also reported that the U.S. Army JSEP (computer-delivered) program was also being investigated for use by guardsmen for basic skills training that was military-related in content. The JSEP program focuses more on discrete skills for use with specific military materials than on the BSEP strategic processing skills that each cognitive generalization and transfer from job-specific examples newly encountered military situations. JSEP does, however, provide another medium for instruction which is useful for learners and instructors. JSEP (Job Skills Education Program) runs on the Plato system or CYBRIS system.

Additionally, Major Berry expressed concern over drops in numbers of pre-military development center pilot participants and suggested that use of "green" materials such as BSEP and JSEP might be more appealing to program participants by implication of a more direct link to their goal of preparing for military enlistment.

6. Following on-site visitation, PPLC investigator Jorie Philippi reviewed a variety of basic skills curriculum materials available from major publishers of adult education instructional materials. Several computer-delivered instruction systems were analyzed, with the following findings:

> BASE - skills related to specific jobs via survey check lists and cross-walking job descriptions from Dictionary of Occupational Titles listings from 1979; tests for Dictionary of Occupational Titles levels of academic skills performance; recommended for use with high school and vocational education, with minimal application to junior high level students. (Can be further cross-referenced to Army MOS needs by cross-walking 1979 DOT findings with current Army job descriptions.) No costs available without company sales person site visit.
>
> Conover System - competency-based; assessment and remediation lessons; utilizes word-problems approach to create work-related exercises for life skills and job skills in a number of occupational areas. Including management system and approximately 35 discs for each basic skills area, i.e., reading, math, communication, cost is approximately $5400 (plus additional hardware costs estimated to be approximately $40,000 for ten learner stations and a host).
>
> Pathfind Systems, Division of YES, Canada - designed to serve academic upgrading needs of adults and high school students; curriculum addresses five subject areas in traditional academic basic skills remediation and life skills; not job-related; can only be purchased as a complete system with hardware and management service. No costs available without company salesperson site visit.
>
> EDL Learning 100 - focuses on remedial reading and communication skills for adults, grade levels 1.0 to 10.5; includes instruction in traditional academic basic skills for word attack, vocabulary development, reading comprehension, grammar and usage and listening skills; contains criterion-referenced tests; requires Tandy or other IBM compatible computer equipment. Hardware costs for one teacher management center and 10 learner stations are $38,000; courseware costs are $25,000 for basic lessons plus up to $33,500 for supplemental lessons for various specific grade levels.

Print instructional materials for adult basic education that were examined included publications from Cambridge, Prentice-Hall, Scott-Foresman, Fearon, Janus, Quercus, PACE Learning Systems, Educational Design, McGraw Hill, Steck-Vaughn, New Reader's Press, Curriculum Associates and Delta Systems (Voices for New Readers). These materials were all traditionally designed as exercises for remediating discrete basic skill applications for academic contexts and in no way appeared superior to those already available at the pilot site. (Catalogs are available from each publisher or from PPLC "analysis collection.")

Conclusions And Recommendations

PPLC concludes the following from investigation activities:

contact hours with participants is limited, averaging 40 - 50 hours class time per subject, i.e., reading, math, life coping skills;

participant program entry ability levels, as measured by the TABE, range from 2.0 to 10.5, with the majority of learners functioning between estimated grade levels of 7.5 and 9.0;

instructors would prefer to prescribe and create materials to fit individual learner's needs based on formal and informal diagnostic evidence and on their own professional abilities as instructors; they would like to have input into the materials to be made available to them for use during classes and tutoring sessions and would like guidelines for correlating traditional academic instructional materials with military job task skill applications to accomodate learners' specific pre-military development needs;

pilot program design and program site administrator preferences indicate a desire for computer-assisted instruction to accompany classroom instruction; the academic remediation system that has been piloted at the sit, i.e. Josten's Invest, has been found unsuitable for use with this population;

the Mississippi Army National Guard would like to see instruction provided that emphasizes the strategic processes for mastering those skill applications required for competent performance of military job tasks in order to prepare participants for successful armed service experiences; and

instructional materials for military-related and traditional academic skills that match the range of skill ability levels for the targeted program participants are available in both computer-delivered and paper-pencil media.

Based on these conclusions, PPLC makes the following recommendations:

1. Use a core of instructional materials that teach military-related applications of reading, math and writing skills. Such functional context materials will enhance transfer of skills to military job performance and provide motivation for training for future military career opportunities. Research from the past fifty years (much of which was conducted with military trainees and enlistees) provides extensive evidence that applications of basic skills used in performance of job tasks differ from those used in performance of academic tasks; studies with military populations also indicate that the use of military materials to teach job-related applications of basic skills improves performance on standardized texts of generic (academic) basic skills. Recommended materials include a) Basic Skills Education Program (BSEP) Reading to Do, Reading to Learn, Reading Anthology, Generic Review and Career Management Field Mathematics, estimated to contain up to 800 hours of instruction; b) McFann-Gray Army Reading Series, estimated to contain up to 200 hours of instruction; and c) Job Skills Education Program (JSEP) Military Plato Version, estimated to contain up to 300 hours of instruction. All of these materials are suitable for participants having ability levels from grade level 6.0 and up. Military-related materials would also better meet the program goals of the Mississippi Army National Guard and the U.S. Army, who will be the recipients of those participants who successfully complete program requirements. JSEP courseware is free because it was developed with Department of Defense monies; BSEP texts are priced at approximately $5 each, and McFann-Gray materials should be available for about the same price.

2. Use commercial-available academic basic skills paper-pencil adult education materials, along with other computer-delivered instruction available on the Plato to supplement the military-related core of instructional materials. Providing instructors with a library of comprehensive materials containing lessons in key skill areas referenced on the Individual Education Plan, targeting a variety of potential participant ability levels, e.g. 2.0 - 10.5, with the majority of materials addressing the participants' high concentration range of grade levels 7.5 - 9.0. The list provided at the end of this chapter serves as an example to assist instructors in coordinating supplemental materials with skills taught in the military-related materials. Such a list of cross-references can be developed for any publishers materials and further coordinated with any software being used. Using the Plato or CYBRIS system to deliver both JSEP military-related skills lessons and to deliver supplemental academic basic skills lesson is the most cost-effective way to incorporate computer-assisted instruction into the program. The Plato system offers a wide variety of generic basic skills programs targeting learners in the ability range of the program's population.

3. Develop an Individual Education Plan (IEP) for each participant, using an instructor-learner contract format. This will enable instructors to customize learning to meet the needs and ability levels of each participant. The IEP developed for the Pre-Military Development Center Program identifies both "enabling skills" (e.g., decoding, whole number operations) and strategic processing skills that are used in performing typical military job tasks. Selecting specific military-related functional context materials and exercises, along with coordinated supplemental academic skill building exercises, to meet each learner's needs as listed on his or her IEP will provide a system of tailored instruction that enhances rapid improvement of prerequisite military job skills and life skills.

Ms. Jorie Philippi is currently President of Performance Plus Learning Consultants, Inc. in Springfield, Virginia. She was curriculum specialist at Big Bend Community College, European Division, where she coordinated an individualized Basic Skills Reading Program for 50,000 adult military service members annually in Europe. She is author of The Workplace Literacy Workbook, A Hands-On Guide for Program Development published by Simon and Schuster Workplace Resources, April 1991.

Sample Basic Skills Supplemental Resource List
(Cambridge Adult Education/Prentice-Hall Regents Publications)

SKILLS	TITLES
Alphabetizing	Mastering Spelling Power English 3-8
Using Locator Words	Mastering Reading Comprehension 1 Basic Reading Skills Basic ReadingSkills Workbook
Skimming & Scanning	Basic Reading Skills
Locating Facts	Basic Reading Skills Mastering Reading Comprehension 1
Reading for Details	Basic Reading Skills Mastering Reading Comprehension 1 Basic Reading Skills Workbook
Identifying Main Idea & Details	Basic ReadingSkills Basic Reading Skills Workbook Mastering Reading Comprehension 1
Classifying by Category	Basic Reading SKills Learn to Listen; Listen to Learn
Making Comparisons	Learn to Listen; Listen to Learn React Interact Mastering Reading Comprehension 1
Recognizing Relevant/ Irrelevant Information	React Interact Basic Reading Skills Basic Reading Skills Workbook
Drawing Conclusions	Basic Reading Skills Basic Reading Skills Workbook Mastering Reading Comprehension 1 React Interact
Predicting Outcomes	React Interact Basic Reading Skills
Making Decisions	Basic Reading Skills React Interact
Sequencing Information by Time Order	Basic Reading SKills Mastering Reading Comprehension 1 Learn to Listen; Listen to Learn
Following Sequential Directions	Learn to Listen; Listen to Learn Mastering Reading Comprehension 1

Reading Completed Forms	Money Management
Reading Lists & Tables	Basic Reading SKills Basic Reading SKills Workbook Mastering Reading Comprehension 1
Recognizing Cause/ Effect Relationships	Mastering ReadingComprehension 1 Learn to Listen; Listen to Learn React Interact
Prioritizing	React Interact
Problem Solving	React Interact
Recognizing Signal Words	Learn to Listen; Listen to Learn Understanding and Using English Grammar, 2nd Ed.
Using a Table of Contents	Living in the Reader's World
Summarizing Information	React Interact Learn to Listen; Listen to Learn Power English 5-8
Using Correct Spellings	Mastering Spelling Power English 5-8
Identifying Grammar Rules and Use	Mastering Grammar 1 Power English 3-8 Understanding and Using English Grammar, 2nd Ed.
Formulating Questions	Basic Reading SKills
Entering Information onto Forms	Money Management
Counting Whole Numbers	Basic Skills with Math: A General Review Basic SKills with Whole Numbers
Sequencing Numbers	Basic Skills with Whole Numbers
Basic Whole Number Operations	Basic Skills with Whole Numbers Basic SKills with Math: A General Review
Decimal Expressions & Operations	Basic Skills with Decimals and Percents Basic SKills with Math: A General Review
Percent Expressions & Operations	Basic Skills with Decimals and Percents Basic Skills with Math: A General Review
Understanding Linear Measurement	Math Master 2
Converting Standard & Metric Measures	Math Master 1

Rounding Off Numbers	Math Master 1
Estimating	The High School Equivalency Exam Comprehensive Book
Using Formulas	Basic Skills with Math: A General Review Basic Skills with Decimals and Percents
Multiple Step Calculations	Basic Skills with Decimals and Percents
GED Test Preparation	The High School Equivalency Exam Comprehensive Book
English as a Second Language	Learn to Listen; Listen to Learn Understanding and Using English Grammar, 2nd Ed.

* CCC Computer-Assisted Instruction Courses from The Reading Network, Essentials for Living and Working, and Math Concepts and Skills also address all the skill areas listed above. These computer courses are just three of the twenty-six available that run on several different hardware platforms. CCC, the Computer Curriculum Corporation, is a subsidiary of Simon & Schuster and a sister company to Cambridge and Prentice-Hall Regents.

"I think if you want to learn and know that you can pass the ASVAB to get into the armed forces, this is the program to come go.

- Erik, Participant

EMPLOYABILITY CERTIFICATION PROCESS

Allen C. Jones

Introduction

One statement can be made about the future with absolute certainty: it will be different from today. Constant change is one of the most significant aspects of the U.S. job market. Changes in the population, the introduction of new technology or business practices, and changes in the needs and tastes of the public continually alter the economy and affect employment in all occupations. The growth of the population has spurred the need for workers to provide more housing, medical care, education, and other services and goods. The use of new technology has both created and eliminated hundreds of thousands of jobs. The computer, for example, has given birth to an entire new group of occupations- programmers, systems analysts, peripheral equipment operators- while at the same time it has decreased the need for inventory clerks, bookkeepers, and other clerical workers. Changes in the way businesses are organized and managed have had similar effects. For example, the use of centralized credit offices has reduced the need for credit managers in retail stores.

Changes in population are among the basic factors that will affect employment opportunities in the future. Three population trends that will affect future employment opportunities are population growth, shifts in the age structure of the population, and movement of the population within the country.

The population of the United States has increased throughout the 20th Century. However, the rate of growth (the size of annual increases) was declining until the "baby boom" after World War II. During the 1960s, the rate of growth once again started to decline. The census of 1990 is expected to show an increase to between 245 and 250 million. This is 11 percent plus higher than the 1978 level of 219 million. Continued growth will mean more people to provide with goods and services causing greater demand for workers in many industries. The effects of population growth on employment in various occupations will differ. The differences are accounted for in part by the age distribution of the future population.

Because of the baby boom, the proportion of young people in the population was high in the 1970s. Through the 1980s, when these young adults began entering their prime work years, the proportion of the population between the ages of 25 and 44 began to swell. By 1990, nearly one-third of the population is expected to be in this age group. As a result of the relatively low number of births during the 1960s and early 1970s, the number of people between the ages of 14 and 24 will decline in the coming decade.

The population shift to the South and West of the past 20 years is expected to continue and projections are that this will result in over half the population living in these areas in the 1990s. Such geographic shifts in the population will alter the demand for and supply of workers in local job markets. With more people looking for work in these areas, competition in many occupations will increase.

The civilian labor force consists of people with jobs -wage and salary workers, self-employed workers, and unpaid family workers - and people looking for jobs - the unemployed. Through the late 1960s and the 1970s, the number of people in the labor force grew tremendously because many people born during the baby boom entered the job market, and more women sought jobs. In 1978, the civilian labor force totaled about 100 million persons - 63.2 percent of the non-institutional population 16 years of age and over.

The labor force continued to grow during the 1980s but at a slower rate. By 1990 about 119 million persons are now counted in the labor force - an 18.5 percent increase over the 1978 level. Contributing to this growth was the expansion of the working age population and the continued rise in the proportion of women who work. The labor force grew more slowly between 1985 and 1990 than in the early 1980s. This slowdown resulted from a drop in the number of young people entering working age and less rapid growth of the participation rate of women.

A larger labor force will mean more people looking for jobs. However, because of shifts in age structure, the employment outlook for many individuals will improve. As a result of the large number of young people who have entered the labor force in recent years, competition for many entry-level jobs has been stiff and many young workers have been unemployed. As the number of people between 16 and 24 - the ages when most people first enter the labor force - drops, competition for entry-level jobs should ease. The 24 to 44 year old age group, those born during the "baby boom", will find jobs and gain work experience. The whole economy should benefit since experienced workers generally are more productive and less likely to be unemployed.

Employers always wish to hire the best qualified persons available. This does not mean that they always choose those applicants who have the most education. However, individuals looking for a job should be aware that higher educational attainment of the labor force as a whole could increase competition in many occupations.

Employers have repeatedly been asked to determine the skills needed to be successful in the modern work place. Further, they have been asked to identify the generic skills and behaviors they, as employers, believe to be important across a broad range of business, service, and industrial sector jobs. The abilities and behaviors identified as necessary for success on any job will be presented in this report.

According to a recent article in Business Week (September 19, 1988), more than three-quarters of this country's new employees through the year 2000 will have deficient verbal and writing skills. Most new jobs will require individuals who have good reading and writing skills, but fewer than one in four of the new employees will be able to function at the required levels.

Further, Business Week states that the nation is facing a monumental mismatch between jobs and the ability of Americans to do them. Three forces are combining to produce this gap in the skills the economy will require. First, technology is upgrading the work required in most jobs. Second, job growth will be mainly in high skill occupations. Most of these jobs will be in the service sector. Finally, the way in which work now is being organized requires a completely new set of skills. As companies shift from the old models of assembly-line production to Japanese-style work teams, employees will have to sharpen their communications skills.

The evidence is overwhelming. Scores of business publications and research documents conclude that America is losing its competitive edge in a global economy. The reason: a work force unprepared for the changing work place.

That's because technology is changing the work required in most jobs, and growth areas will be mainly in high skill occupations. The tools we use are more complicated, each requiring more flexibility and more knowledge. In addition, we're changing the way work is organized, and requiring far more communications skills.

Unfortunately, corporate America has been forced to spend $200 billion a year on training and retraining its work force, and at least $35 billion on remedial training. A third of Florida's small businesses say that their new workers usually needed some remedial training. Business and industry are demanding a more qualified work force.

General

Our economic welfare depends upon a quality work force. To obtain a quality work force, the first step is to identify those factors that are necessary for successful employment. That is, it is necessary to define more clearly what is meant by "employability."

Employability skills can generally be describe as those activities and that knowledge which enables a person to adequately obtain a job. More simply, employability skills may also be considered to be techniques of getting a job.

Work preparation must include development of the human or nontechnical skills one needs to function successfully in the work force. In general, employers want workers who are reliable, self-confident, responsible, cooperative, ethical, and willing to learn. They want prospective employees to convey these qualities at the pre-employment stage by showing interest in and enthusiasm for the job and by presenting positive appearances and attitudes.

The Employability Skills Assessment Literature Review by Misser and Pfister (1988) focused on three basic questions: (1) What variables are found to be related to successful performance in jobs? (2) What assessments have been used successfully to select applicants or to predict success on jobs? and (3) What assessments have been used in the behavioral, attitude, interpersonal, and teamwork areas? A sub-question focused on "what is occupational ôr job-related literacy?" Among their findings were that:
(a) most occupations require a high level of basic skills; (b) the ability to use basic skills in problem solving on the job is important; (c) skills considered important for one occupational area are often generalizable to other occupations; (d) interpersonal skills were the most generalizable across areas; (e) skills such as being adaptable, ability to learn quickly, good work attitudes and habits, interpersonal skills, problem-solving skills, and personal characteristics receive especially high ratings by employers; and (f) the importance of basic skills were ranked in one study as follows: speaking, writing, listening, reasoning, reading, math, and science.

In Workplace Basics: The Skills Employers Want by Carnevale, Gainer and Meltzer (1988), it was revealed that "employers want good basic academic skills and much more". The academic skills comprise just the tip of the iceberg. They want employees who have learned how to learn, have good listening and oral communications skills, are good at problem-solving and creative thinking, have good self-esteem, are motivated and able to set goals, are interested in personal and career development, have interpersonal and negotiation skills, are good at team-work, have organizational effectiveness, and who can assume leadership roles.

Under current law, the function of assessment for employability has been defined in the legislation as a proficiency-certification process. One obvious point to consider is the predominance of personal attributes in the highest rated skills. Personal attributes are notoriously hard to measure. Among other problems, personal attributes can be easily faked. Assessment for employability is a process that should assist young people to assess themselves. There should be no motivation to fake your own personal characteristics. However, recall that many young people do not even recognize the connection between skills acquired in school and employment. Further, the literature on self-evaluation - while not extensive - suggests that not all youth are capable of accurate self assessment.

Results of Surveys

A special committee of the Mississippi Economic Council surveyed 1,000 Mississippi business and industrial leaders who employ vocational and high school graduates. Mississippi's business and industrial leaders are not satisfied with the educational preparedness of today's high school and vocational graduates.

They are, however, better satisfied with graduates of the vocational program than they are with the regular high school graduates who move immediately into the work force. Most employers responding to the survey reported that they are offering remedial education work within their own business firms in an attempt to fill the education gap.

The quality most often missing among both vocational and regular high school graduates, according to respondents, is the skill of communications, especially the use of proper grammar. Communication skills identified as lacking among graduates included both written and oral communications, spelling, and listening. Respondents reported their frustrations with employees who cannot communicate adequately or correctly with co-workers, supervisors, and customers.

The second most prevalent deficiency among graduates was the lack of ability to read with comprehension. Too many vocational and high school graduates, the respondents said, are not able to read and understand instructions.

Other qualities most often lacking in vocational graduates, according to business leaders participating in the survey, were self-esteem, mathematical skills, dependability, and motivation. Among regular high school graduates, survey respondents cited problems related to dependability, including both a lack of loyalty and a sense of the work ethic. Mathematical skills and self-motivation were also identified as problem areas.

Employers of both groups reported that the most important skills for their graduate labor force are reading with comprehension, communications, dependability, and mathematical skills. Half the participating employers expressed a specific need for improved grammar among employees. Employers of both vocational and high school graduates called for improved training in reading, oral and written communications, and math.

In summary, employers responding to the MEC survey agree that they need workers who:

Read with understanding.

Write sentences with correct structure, grammar, and spelling.

Are dependable and loyal.

Add, subtract, multiply, and divide.

Listen to and understand instructions.

Understand the free enterprise system.

Work well with others.

Are punctual and show pride in their work.

Are able to work with computers and word processors.

In the Florida Employer Opinion Survey of April 1990,
employers indicated that they were generally satisfied with vocationally specific preparation of workers including entry-level and technical skill preparation.

Florida employers indicated that they were less satisfied with the general educational preparation of workers, specifically reading, writing, and math skills.

Satisfaction levels are based on a numerical assignment of "2" to each satisfied response, "1" for each dissatisfied response. These assignments were tallied for each response and the total was divided by the total number of responses in each query area to obtain a final "score". Responses that reflected "no opinion" were not included. The results are listed below:

Overall Education opinions	-1.56
Work force preparation	
Basic Skills	-1.47
Job-related or associated skills	-1.70
Communicative and interpersonal skills	-1.71

In November of 1987, Governor James J. Blanchard of Michigan appointed an Employability Skills Task Force and charged them with identifying the generic skills and behaviors employers believed important in the job market. This task force developed a list of 26 skills which were redefined into a list of 86 skills grouped under three broad areas: Academic Skills, Personal Management Skills, and Teamwork Skills. The 86 skills were then placed into a questionnaire and sent to a representative sample of 7,500 employers in the state of Michigan.

The overall results demonstrated that the 86 skills were indeed considered important by the employers of the state. When rated on a 4-point scale (critical, highly needed, somewhat needed, and not needed), 40% of the skills received mean ratings higher than the "highly needed" category and 76% of the skills received ratings above the middle point on the scale.

Of the seven highest rated skills, five were in the area of Personal Management and two in the area of Academic Skills. The Personal Management skills related to being drug free, having honesty and integrity, showing respect for others, showing pride in one's work, and attendance and punctuality. The Academic Skills related to verbal communications on the job (paying attention to the person speaking and following verbal directions).

A group of policy makers, researchers, employers, training and educational service providers and their customers in Michigan were interviewed. The responses were organized into 20 separate groups. By far the most common skill mentioned (19 of the 20 interview groups) was "basic literacy skills" including reading, writing, math and comprehension. Computer skills, computer literacy, and computer experience was the second most often identified skill. Major discussion (17 out of 20) centered on essential behavior and attitudinal skills such as work ethic, time and attendance, punctuality, flexibility and adaptability, understanding the new world of work, life-long learning, ability to follow direction, accepting the reality of a constantly changing world of work, and individual motivation.

Communication skills (cited by 16 of the 20 groups) were described as both written and oral. Workers need to have the ability to use language effectively to communicate and share ideas.

Self-esteem and self-confidence were cited as integral in the work environment, in effectively communicating ideas, and seeking and finding a job. These all are related to effective interpersonal skills. Individuals need to be able to work with other people. Teamwork, people skills, participatory management were examples often used when interpersonal skills were mentioned. Thirteen of the 20 groups cited interpersonal skills as very important.

Specific job skills, as discussed by one-half of the groups, were not as important as basic literacy, attitudinal and interpersonal skills. Most employers explained that if workers were equipped with the basics, specific job skills could be taught on the job.

Not surprising was the fact that the problem most often observed (cited by all 20 groups) was the lack of appropriate behavioral and attitudinal skills. Lack of motivation, punctuality, flexibility and adaptability, resentment of supervision, inability to follow directions and an unrealistic perception of options were recurring themes.

Michigan employers across industries, from both large and small businesses, agreed that the following skills and behaviors are among those needed in their employees: Academic, such as oral and written communication, reading, basic mathematical computation and problem solving; Personal Management, such as responsibility, integrity, dependability, respect for others, enthusiasm and pride in work; and Teamwork, such as communicating and working cooperatively with others, working effectively within the organization, and being receptive to improved ways of working.

In a recent survey of professional managers, listed below are the fifteen most mentioned reasons for not hiring job seekers. (Given in rank order)

1. Poor appearance (not dressed properly, poorly groomed)
2. Acting like a know-it-all
3. Can't express one's self clearly; poor voice, diction, grammar
4. Lack of planning for the work; no purposes or goals
5. Lack of confidence or poise
6. No interest or enthusiasm for the job
7. Not active in school extra-curricular programs
8. Interested only in the best dollar offer
9. Poor school record
10. Unwilling to start at the bottom
11. Makes excuses, hedges on unfavorable record
12. No tact
13. Not mature
14. No curiosity about the job
15. Critical of past employers

Conclusions

It is evident from the numbers of narrowly skilled, displaced workers struggling to find new jobs that being able to do specific tasks is not enough. What is important is whether an individual possesses a sufficient range of skills and attitudes to be able to take advantage of life's economic, social, and personal opportunities while maintaining a flexible outlook. What matters is whether the skills people possess are broad and "portable" - that is, applicable to many jobs, not just one.

In addition to the steady increase in the number of jobs requiring higher skill levels, the content of all jobs, including those at the low end, will require significantly higher language, math, and reasoning skills in the future than they do now, according to the U.S. Department of Labor. While this is especially true in technical or managerial occupations, it is also true in those fast-growing occupations that traditionally have required only modest educational attainment, such as service, sales, or clerical jobs. Since there will be very few net new jobs in the traditionally low-skilled occupations (laborers, etc.), these service-related jobs will become the "least skilled" new jobs of the future - even though they are far from unskilled jobs. Furthermore, we can expect the pressure for skill upgrading in the service-related jobs to increase, as industries in this sector strive to overcome their lagging productivity.

Today, there are almost as many assessment systems as there are programs, and few are designed to address the broad range of skills required by our emerging economy. The system must be driven by each individual's skill needs in each of the categories included in the definition of "work-readiness," not by mandates or eligibility requirements of programs that currently exist.

In principle, employment tests are designed to measure the aptitudes, skills, and experience needed to acceptably perform the duties of position that is to be filled. The idea behind the test is not only to distinguish between applicants who have the required abilities and those who do not, but also to select those who are best qualified in a lesser degree. Applicants who receive the highest scores on the pre-employment tests have the best chance of getting the jobs they want.

There are various types of examinations. Some tests measure aptitude - the ability to learn how to perform the duties of a position. These tests are used for positions that do not require previous specialized training or experience. Aptitude tests select the persons who have the characteristics known to be related to success on the job. A good example is the dexterity test in which the applicants copy a pattern of dots in squares by pricking pinholes in smaller squares. The ability to do this extremely delicate work accurately and well is valuable in jobs that require the assembling of fine mechanical equipment; it is also related to success in training for drafting positions.

Examples of other aptitude tests are: (1) the checking test use for clerical positions; (2) tests of reasoning ability, used in combination with other tests, for positions requiring alert mental processes and the use of good judgment; and (3) tests on understanding mechanical movements - an ability needed in various trades.

Other tests measure achievement in certain fields, such as physics, or other sciences. Still others measure skills, for example, skill in shorthand.

There is considerable criticism of the wide-spread use of written tests in selecting and promoting employees. No one commercially produced employment test will cover all skills needed. They can, however, be modified to indicate the skills sought by the employer.

It was not the intent of the writer to identify specific skills associated with individual jobs. Rather, it was understood that the charge was to define the generic skills and behaviors employers believe to be important across a broad range of business, service, and industrial sector jobs.

The writer approached employability assessment in a somewhat different manner - focusing on an assessment process rather than a single test.

Employers need and demand workers who have a broad set of workplace skills. These skills include a higher order of academic and problem-solving abilities, the ability to contribute to a group and to function on multiple work teams, and the ability to demonstrate responsibility, reliability and dependability.

From the outset, the assessment process should be designed to produce employability profiles for individuals rather than a single indicator or score of employability.

Most importantly, the assessment should primarily be used for diagnostic/prescriptive purposes rather than to sort out individuals who are employable from those who are unemployable.

The writer concluded that the essential skills could be grouped into three broad categories; Academic, Personal Management, and Teamwork. Academic Skills include those skills that provide the basic educational foundation necessary to benefit from further training and education. This category encompasses communication, comprehension, quantitative, critical thinking, and science and technology skills. Personal Management Skills include those skills related to developing the attitudes, abilities, behaviors and decision making processes associated with responsibility and dependability. Contained within this category are abilities to: set goals and implement strategies for achieving them, identify and act on personal values, and to demonstrate self discipline. Teamwork Skills include those skills that relate to an individual's ability to contribute to a group or organization's growth and development. Included in this category are interpersonal, organizational, negotiation, creativity/innovation, and leadership skills.

Any profile of employability skills must be generic in nature, given the wide variety and complexity of jobs in the military service. Basic Academic Skills - the ability to read, write, compute, and communicate are fundamental tools in a work environment. As important as they are, however, they no longer stand alone as guideposts to success. These basic academic skills are directly and inextricably interrelated with personal management and teamwork skills. All three skills categories should be viewed together to accurately profile the successful worker.

Personal management and teamwork skills are difficult to measure. That is, these skill categories do not necessarily lend themselves to simple "paper and pencil" evaluation. The writer did not, however, exclude any skill from consideration due to measurement difficulties.

Attached as appendices are instruments that can be used to develop an "employability profile" for an individual. The Personal Data Sheet (appendix A) will produce information about where the individual is coming from (type of community, family background, educational history, etc.) and where he/she wants to go (view of education, both formal and informal). The Personality Traits Checklist (Appendix B) will help to identify those areas needed in Personal Management and Teamwork Areas.

The Emotional Maturity Self-Test (Appendix C) is designed to determine maturity levels of those being considered. The Self-Analysis Test (Appendix D) is designed to assist the individual in making detached observations of him/herself. The Self-Evaluation Test (Appendix E) is an example of a type of test used to establish "employability" in the sales field.

The final two appendices list "job characteristics needed by the military" (Appendix F) and a summary of "Employability Skills Profile" (Appendix G). In order to be as objective as possible and at the same time to be as fair as possible, a profile should be developed showing strength and weaknesses, desirable as well as undesirable traits, background and desired future.

Mr. Allen Jones is a vocational educational consultant with nineteen years experience as a vocational counselor at Vocational Technical Center in Pascagoula, Mississippi. He has also been a high school principal and served as a commissioned officer in the United States Army.

APPENDIX A

Personal Data Sheet

Please circle the letter of the appropriate answer.

1. Are you: (A) Male (B) Female

2. How old were you on your last birthday?
   (A) 17 (B) 18 (C) 19 (D) 20 (E) 21 (F) 21+

3. Where have you spent most of your life?
   (A) In this city, town, or county.
   (B) In this state but outside this city, town or county.
   (C) In another state in the U.S.
   (D) in another country outside the U.S.

4. In what type of community have you spent most of your life? (Give your best estimate if you are not sure.)
   (A) In the open country or in a farming community.
   (B) In a small town (less than 10,000 people) that was not a suburb.
   (C) Inside a medium sized city (10,000 to 100,000 people).
   (D) In a suburb of a medium sized city.
   (E) Inside a city of more than 100,000 people.
   (F) In a suburb of a large city.

5. How many people live in your home, including yourself, parents, brothers, sisters, relatives, and others who live with you?
   (A) 2 (B) 3 (C) 4 (D) 5 (E) 6 (F) 7 (G) 8 (H) 9 or more

6. How many brothers do you have who are older than you are? (Include stepbrothers and half brothers, if any.)
   (A) None (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 or more

7. How many sisters do you have who are older than you are? (Include stepsisters and half sisters, if any.)
   (A) None (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 or more

8. How many brothers do you have who are younger than you are? (Include stepbrothers and half brothers, if any.)
   (A) None (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 or more

9. How many sisters do you have who are younger than you are? (Include stepsisters and half sisters, if any.)
   (A) None (B) 1 (C) 2 (D) 3 (E) 4 (F) 5 or more

10. How many of your older brothers and sisters left high school before finishing?
    (A) Have no older brothers or sisters.

(B) None
(C) 1
(D) 2
(E) 3
(F) 4
(G) 5 or more

11. Does anyone in your home speak a language other than English most of the time?
(A) No.
(B) If yes, what language________________________?

12. Do you speak a language other than English outside of school?
(A) Yes, frequently (C) Yes, rarely
(B) Yes, occasionally (D) No

13. Who is now acting as your father? If you are adopted, consider your adoptive father as your real father.
(A) My real father, who is living at home.
(B) My real father, who is not living at home.
(C) My stepfather.
(D) My foster father.
(E) My grandfather.
(F) Another relative (uncle, etc.).
(G) Another adult.
(H) No one.

14. Who is now acting as your mother? If you are adopted, consider your adoptive mother as your real mother.
(A) My real mother, who is living at home.
(B) My real mother, who is not living at home.
(C) My stepmother.
(D) My foster mother.
(E) My grandmother.
(F) Another relative (aunt, etc.).
(G) Another adult.
(H) No one.

Please answer all questions about your parents in terms of your answers to questions 13 and 14. In situations where no one is now acting as mother or father, answer questions about your parents in terms of your real father and mother whether they are living or dead.

15. What work does your father do? You probable will not find his exact job listed, but circle the one that comes closest. If he is now out of work or if he's retired, mark the one that he usually did. Mark only his main job, if he works on more than one.

(A) Technical - such as draftsman, surveyor, medical or dental technician, etc.

(B) Official - such as manufacturer, officer in a large company, banker, government official or inspector, etc.
(C) Manager - such as sales manager, store manager, office manager, factory supervisor, etc.
(D) Semi-skilled Worker - such as factory machine operator, bus or cab driver, meat cutter, etc.
(E) Clerical Worker - such as bank teller, bookkeeper, sales clerk, office clerk, mail carrier, messenger, etc.
(F) Service Worker - such as barber, waiter, etc.
(G) Protective Worker - such as policeman, detective, sheriff, fireman, etc.
(H) Salesman - such as real estate or insurance.
(I) Farm or ranch manager or owner.
(J) Farm worker on one or more than one farm.
(K) Workman or Laborer - such as factory or mine worker, fisherman, filling station attendant, longshoreman, etc.
(L) Professional - such as accountant, artist, clergyman, dentist, doctor, engineer, lawyer, librarian, scientist, teacher, social worker, etc.
(M) Skilled Worker or Workman - such as baker, carpenter, electrician, enlisted man in the armed forces, mechanic, plumber, plasterer, tailor, foreman in a factory or mine, etc.
(N) Don't know.

16. How far in school did your father go?

(A) None, or some grade school.
(B) Completed grade school.
(C) Some high school, but did not graduate.
(D) Graduated from high school.
(E) Technical or business school after high school.
(F) Some college, but less than four years.
(G) Graduated from a 4-year college.
(H) Attended graduate or professional school.
(I) Don't know.

17. How far in school did your mother go?

(A) None, or some grade school.
(B) Completed grade school.
(C) Some high school, but did not graduate.
(D) Graduated from high school.
(E) Technical or business school after high school.
(F) Some college, but less than four years.
(G) Graduated from a 4-year college.
(H) Attended graduate or professional school.
(I) Don't know.

18. Does your mother have a job outside your home?
(A) Yes, full-time.
(B) Yes, part-time.

(C) No.

19. If you checked (A) or (B) on number 18, tell the type of work your mother does. Refer to number 15 for description if necessary.
    - (A) Technical.
    - (B) Official.
    - (C) Manager.
    - (D) Semi-skilled worker.
    - (E) Clerical worker.
    - (F) Service worker.
    - (G) Protective worker.
    - (H) Salesman.
    - (I) Farm or ranch manager or owner.
    - (J) Farm worker.
    - (K) Workman or laborer.
    - (L) Professional.
    - (M) Skilled worker.
    - (N) Don't know.

The items listed below are things your family may have. mark (A) if your family has it. Mark (B) if your family does not have it.

20. Telephone
    - (A) Yes
    - (B) No

21. Dictionary
    - (A) Yes
    - (B) No

22. Encyclopedia
    - (A) Yes
    - (B) No

23. Daily Newspaper
    - (A) Yes
    - (B) No

24. How often do you go to a public library or bookmobile (not your school library)?
    - (A) Once a week or more.
    - (B) 2 or 3 times a month.
    - (C) Once a month or less.
    - (D) Never

25. How many magazines do you and your family get regularly at home?
    - (A) None
    - (B) 1 or 2
    - (C) 3 or 4
    - (D) 5 or more.

26. How many books are in your home?

(A) None or very few (0 to 9).
(B) A few (10 to 24).
(C) One bookcase full (25 to 99).
(D) Two bookcases full (100 to 249).
(E) Three or more bookcases full (250 or more).

27. Did you go to kindergarten before you started the first grade?
(A) Yes (B) No (C) Don't remember

28. Did you go to nursery school before you went to kindergarten?
(A) Yes (B) No (C) Don't remember

29. About how many times have you changed schools since you started the first grade (not counting promotions from one school to another)?
(A) Never
(B) Once
(C) Twice
(E) Three times
(F) Four times or more

30. When was the last time you changed schools (not counting promotions from one school to another)?
(A) I have not changed schools.
(B) Less than a year ago.
(C) About one year ago.
(D) About two years ago.
(E) About three years ago.
(F) About four years ago.
(G) About five or more years ago.

31. How far do you want to go in school?
(A) I do not want to finish high school.
(B) I want to finish high school only.
(C) I want to go to technical, nursing, or business school after high school.
(D) Some college training, but less than four years.
(E) I want to graduate from a 4-year college.
(F) I want to do professional or graduate work after I finish college.

32. Are you planning to go to college (junior or four-year college)?
(A) Definitely yes.
(B) Probably yes.
(C) Probably not.
(D) Definitely not.

33. How many books did you read (not including those required for school) over the past summer? Do not count magazines or comic books.
(A) None.

(B) 1 to 5.
(C) 6 to 10.
(D) 11 to 15.
(E) 16 to 20.
(F) 21 or more.

34. **On an average school day, how much time do you spend watching TV outside of school?**
(A) **None or almost none.**
(B) **About 1/2 hour a day.**
(C) **About 1 hour a day.**
(D) **About 1-1/2 hours a day.**
(E) **About 2 hours a day.**
(F) **About 3 hours a day.**
(G) **4 or more hours a day.**

35. **If something happened and you had to stop school now, how would you feel?**
(A) **Very happy - I'd like to quit.**
(B) **I wouldn't care one way or the other.**
(C) **I would be disappointed.**
(D) **I'd try hard to continue.**
(E) **I would do almost anything to stay in school.**

36. **How good a student do you want to be in school?**
(A) **One of the best students in my class.**
(B) **Above the middle of the class.**
(C) **In the middle of my class.**
(D) **Just good enough to get by.**
(E) **I don't care.**

37. On an average school day, how much time to you spend studying outside of school?
(A) None or almost none.
(B) About 1/2 hour a day.
(C) About 1 hour a day.
(D) About 1 1/2 hours a day.
(E) About 2 hours a day.
(F) About 3 hours a day.
(G) 4 or more hours a day.

38. About how many days were you absent from school last year?
(A) None.
(B) 1 or 2 days.
(C) 3 to 6 days.
(D) 7 to 15 days.
(E) 16 or more days.

39. During the last school year, did you ever stay away from school just because you didn't want to come?
(A) No.
(B) Yes, for 1 or 2 days.
(C) Yes, for 6 to 6 days.
(D) Yes, for 7 to 15 days.

(C) Yes, for 16 or more days.

40. Were you on any school athletic team last year as a player or manager?
(A) Yes
(B) No
(C) We didn't have any athletic teams in my school.

41. How bright do you think you are in comparison with the other students in your grade?
(A) Among the brightest.
(B) Above average.
(C) Average.
(D) Below average.
(E) Among the lowest.

42. How do you and your friends rate socially in this school?
(A) At the top.
(B) Near the top.
(C) About the middle.
(D) Near the bottom.

43. Do you feel that you can get to see a guidance counselor when you want to or need to?
(A) Yes.
(B) No.
(C) We have no guidance counselor.

44. How many times did you talk to a guidance counselor last year?
(A) Never
(B) Once
(C) Two or three times.
(D) Four or five times.
(E) Six or more times.
(F) We had no guidance counselor.

APPENDIX B

Personality And Your Job

How do you get along with people? What impression do you leave with teachers, fellow students, friends, employers, members of your own family? What sort of personality do you have?

The word PERSONALITY is difficult to define. Perhaps we may call personality a combination of your personal traits and qualities which in large part determine your level of success, regardless of your ability, aptitude, and training. We probably should use the term here in the broad sense to include traits of character and temperament as well as the general impression one makes on people.

You may be sure that your fellow students, teachers, neighbors, and parents have some ideas now regarding your personality traits. But have you ever analyzed them yourself?

Following are terms and expressions which are sometimes used to describe people. Do not be too severe or too lenient in your self-estimates. Remember that none of us is perfect. There is no ideal personality formula for all to copy. Correct flaws, develop your special personality talents to the utmost. But, BE YOURSELF!

Personality Traits

Check if the following apply. Be honest with yourself, but don't "lean over backward" to be severe in your own self-estimate.

Traits and Qualities

DESIRABLE:

1. Considerate of others.............. ___
2. Industrious........................ ___
3. Make friends easily................ ___
4. Demonstrate initiative............. ___
5. Display qualities of leadership.... ___
6. Liked by others.................... ___
7. Cheerful........................... ___
8. Co-operate with teachers........... ___
9. Dress neatly - well groomed........ ___

10. Take correction graciously......... ___
11. Complete lessons on time........... ___
12. Use time efficiently............... ___
13. Choose proper companions........... ___
14. Logical, convincing speech......... ___
15. Show good judgment................. ___
16. Proper self-confidence............. ___
17. Pleasant voice..................... ___
18. Calm under stress.................. ___
19. Good emotional control............. ___
20. Good work habits................... ___
21. Tactful............................ ___
22. Do not bluff....................... ___
23. Respect property of others......... ___
24. Do own work........................ ___
25. Do more than required.............. ___
26. Develop own ideas.................. ___
27. Aid others......................... ___
28. Support team when losing........... ___
29. High ideals........................ ___
30. Contribute to group................ ___

Total Desirable Traits........ ___

UNDESIRABLE:

1. Untidy appearance.................. ___
2. Mumbling speech.................... ___
3. Swayed by emotions................. ___
4. Erratic judgment................... ___
5. Easily upset....................... ___

6. Irritable........................ ____

7. Brood over disappointments......... ____

8. Lack confidence.................... ____

9. Can't make decisions............... ____

10. Avoid other students............... ____

11. Neglect assignments................ ____

12. Require constant supervision....... ____

13. Must be pushed..................... ____

14. A show-off......................... ____

15. Too much ego....................... ____

16. Poor sport......................... ____

17. Destructive........................ ____

18. Jealous of others.................. ____

19. Discourteous occasionally.......... ____

20. Cannot work with others............ ____

21. A trouble-maker.................... ____

22. Frequent day-dreamer............... ____

23. Careless with money................ ____

24. Work under capacity................ ____

25. Lack purpose....................... ____

26. Careless of property............... ____

27. Lack ambition...................... ____

28. Disrespectful...................... ____

29. Hinder others...................... ____

30. Lose temper often.................. ____

Total Undesirable Traits...... ____

APPENDIX C

Emotional Maturity Self-Test

Using the following rating scale, mark the column that applies to each question:

5=Always 4=Usually 3=Half the Time 2=Seldom 1=Almost Never

		5	4	3	2	1
1.	Can you accept criticism without being overly angry or hurt?					
2.	Do you avoid being overly critical of others, picking out small faults instead of judging them on over-all merit?					
3.	Are you pleased at the successes of your family and friends? Can you sincerely compliment them when deserved?					
4.	Do you refuse to listen to and repeat little items of gossip about others?					
5.	Do you talk largely about other people and things rather than yourself?					
6.	Do you often put the welfare and happiness of others above your own?					
7.	Are you free from emotional outbursts of anger or tears?					
8.	Do you begin disagreeable tasks right away without trying to escape by playing sick or making excuses?					
9.	Can you stay away from home a month or more without undue homesickness?					
10.	Can you weigh facts and make decisions promptly, then stick by your decision?					
11.	Do you put off things you want to do now in favor of more pleasure later?					
12.	Do you usually get along well with your family and friends?					
13.	When things go wrong can you decide the reasons and correct them without making excuses for yourself?					

14. When disagreeing with someone, can you usually work out an agreement which leaves no hard feelings?

15. Can you enjoy parties without having a "wallflower" feeling?

16. Do you get real enjoyment out of doing little things for others, even though you know people will not know who did it?

17. Do you wear neat but modest clothes and not overdress for the occasion?

18. Are you ordinarily free from worry and sadness over past mistakes that can't be changed now?

19. When dealing with others, can you make decisions fairly, regardless of personal dislikes?

20. When you are the leader of a group, do you use democratic methods and avoid forcing your will on others?

21. Are you loyal to your friends, minimizing or not mentioning their faults to others?

22. Are you free from "touchiness," so that others do not have to handle you with "kid gloves"?

23. Do you act accordingly to your honest convictions regardless of what others may think or say about it?

24. Do you have a kindly feeling toward most people, a deep friendship for some, and no unhealthy attachments to any?

25. Do you feel that you usually get what you deserve? Are you free from a feeling that others "have it in for" you?

APPENDIX D

Self-Analysis Test

Self-Analysis Rating Scale

Score each statement in the scale as follows:

4 points -- (always) -- excellent
3 points -- (usually) -- good
2 points -- (sometimes) -- fair
1 point -- (rarely or never) - poor

1. I am intelligent. I grasp instructions quickly and accurately. I comprehend directions instantly. ____

2. I possess initiative. I attempt work beyond that required. I volunteer contributions to class or school activity. I am a leader in extracurricular affairs. ____

3. I am dependable. I am reliable at all times; I do routine duties without being told; I am on hand when I am needed. I am reticent about confidential matters entrusted to me. ____

4. I am punctual. I complete assignments on time and keep appointments on time. ____

5. I am obedient. I observe the rules of my school, of my employer, and of my community. ____

6. I cooperate with others. I work harmoniously in group activities. I consider the interest of the group of paramount importance. ____

7. I possess good judgment. I have good common sense. I distinguish the important from the unimportant in class work. I consider all phases of a situation before deciding on a course of conduct. Others ask my opinions and advice. ____

8. I am tactful. I say and do the right thing when dealing with others. I never give offense to others. ____

9. I am neat and clean. My person and attire are neat and clean. I keep my surroundings for which I am responsible neat and clean. ____

10. I display good taste in attire. My grooming is in the best of taste. ____

11. I have habits of good posture. When I walk, sit or stand, I create a favorable impression because

of my body posture. ____

12. I speak well. The words I speak and my enunciation create a favorable impression. ____

13. I show consideration for others. In making decisions, I am mindful of the effect my future conduct will have on others. ____

14. I am well mannered. I show a refinement of manner and a natural grace in my contact with others. ____

15. I am healthy. I am practically never ill. ____

16. I have tireless energy. Even after a day's work, my energy is not exhausted. ____

17. I am accurate. I get information correctly. I keep records properly in order. ____

18. I am speedy. I lose no time in doing my work. I get my work done quickly. ____

19. I am honest. I do not tell falsehoods. I do not steal money, time, supplies, or ideas. ____

20. I am adaptable. I turn from one task to another. I am not confused by changes. I adjust myself to people, places, and things. ____

21. I have a good memory. I remember the names of persons, telephone numbers, addresses. I remember facts and incidents that have a bearing on a question of the moment. ____

22. I am industrious. I am happy when I am busy. I find work to do at all times.

23. I am loyal. I feel strongly the ties that bind me to ideals, institutions, and to people, both those who depend upon me and those upon whom I depend. ____

24. I have executive ability. I plan work with system and with efficiency, and I assign tasks to others with understanding. I manage people, and they like to work for me. ____

25. I have business-like attitudes. I realize the importance of the work to be done. I am not a "clock-watcher." I realize the value of time and the importance of giving a day's work for a day's pay. ____

TOTAL SCORE ____

APPENDIX E

Self-Evaluation Test

Directions: Which of these statements describe you? Check "Yes" or "No" after each statement. It is to your own interest to be as fair and accurate as possible in your answers. When you have finished, match your answers with the answer key.

1. I'd rather deal with things than people.
___ Yes ___ No
2. I think chemistry is a very interesting subject.
___ Yes ___ No
3. I like talking to strangers.
___ Yes ___ No
4. I would like to be a college teacher.
___ Yes ___ No
5. People find it easy to approach me.
___ Yes ___ No
6. I would like to do research in science.
___ Yes ___ No
7. I enjoy raising money for a charity.
___ Yes ___ No
8. I would like to teach in a school.
___ Yes ___ No
9. I like fashionably dressed people.
___ Yes ___ No
10. I would like to be a watchmaker.
___ Yes ___ No
11. I like to attend conventions.
___ Yes ___ No
12. I've more than average mechanical ingenuity.
___ Yes ___ No
13. I dislike people who borrow things.
___ Yes ___ No
14. I would like to be a mechanical engineer.
___ Yes ___ No
15. I like blind people.
___ Yes ___ No
16. I like to have regular work hours.
___ Yes ___ No
17. I would enjoy making speeches.
___ Yes ___ No
18. I would like to be head of a research department.
___ Yes ___ No
19. I like to keep meeting new people.
___ Yes ___ No
20. I enjoy bargaining when I'm buying something.
___ Yes ___ No

21. I would like to develop some new scientific theories.
___ Yes ___ No
22. I like to have a definite salary.

___ Yes ___ No

23. I'd rather have only a few intimate friends.
___ Yes ___ No

24. I'm better than average at judging values.
___ Yes ___ No

25. I like to play cards.
___ Yes ___ No

Key To Self-Evaluation Test

Add up your answers that agree with these in order to obtain your total score. If your score is 16 or above, your chances of success in the selling field are favorable.

1.	--	N
2.	--	N
3.	Y	--
4.	--	N
5.	--	N
6.	--	N
7.	Y	--
8.	--	N
9.	Y	--
10.	--	N
11.	Y	--
12.	--	N
13.	Y	--
14.	--	N
15.	Y	--
16.	--	N
17.	Y	--
18.	--	N
19.	Y	--
20.	Y	--
21.	--	N
22.	--	N
23.	--	N
24.	Y	--
25.	Y	--

APPENDIX F

Job Characteristics Needed By The Military

1. Leadership (persuasion) - must be able to stimulate others to think or act in a certain way. Skills include organizing people and groups, supervising, directing, and taking initiative.
2. Helping (instructing others) - helps others to learn how to do or understand something.
3. Problem-solving (creativity) - the development of new ideas, programs, designs, or products.
4. Initiative - ability to determine what needs to be done and motivation to complete the job without close supervision.
5. Work as part of a team - essential interaction with fellow workers to get the work done.
6. Frequent public contact - ability to meet or deal with groups on a regular basis.
7. Manual dexterity - adept with hands to make, build, fix, or do things.
8. Physical stamina - ability to endure stress and strain on the job, including heavy lifting, standing, or being uncomfortably confined for long periods.
9. Hazardous - conditions that could present danger because of use of dangerous or infectious materials or working in dangerous surroundings.
10. Outdoors - work in which a major portion of time is spent outdoors, usually without regard to weather conditions.
11. Generally confined - work which requires staying in a specific place for long periods of time.

APPENDIX G

Employability Skills Profile

Three categories of skills will be required of workers in the future:

Academic Skills

(Those skills which provide the basic foundation necessary for a person to get, keep, and progress on a job.)

Employers want a person who can:

- Understand spoken language and speak in the language in which business is conducted.
- Read written materials (including graphs, charts and displays).
- Write in the language in which business is conducted.
- Understand and solve problems involving basic arithmetic and use the results.
- Use the tools and equipment necessary to get a job done.
- Access and use specialized knowledge when necessary (e.g., the sciences or skilled trades) to get a job done.
- Think and act logically by using the steps of the Scientific Method (i.e., identify problems, collect information, form opinions and draw conclusions).

Personal Management Skills

(Those skills related to developing the attitudes and behaviors required to get, keep, and progress on a job.)

Employers want a person who can:

- Identify personal job-related interests, strengths, options and opportunities.
- Demonstrate personal values and ethics in the workplace (e.g., honesty, fairness, and respect for others).
- Exercise a sense of responsibility.

- Demonstrate self control.
- Show pride in one's work.
- Be enthusiastic about the work to be done.
- Follow written or verbal directions.
- Learn new skills and ways of doing things.
- Identify and suggest new ideas for getting a job done.
- Be a leader or a follower depending upon what is necessary to get a job done.

Teamwork Skills

(Those skills needed to work with others on a job.)

Employers want a person who can:

- Identify with the goals, norms, values, customs and culture of the group.
- Communicate with all members of a group.
- Show sensitivity to the thoughts and opinions of others in a group.
- Use a team approach to identify problems and devise solutions to get a job done.
- Exercise "give and take" to achieve group results.
- Function in changing work-settings and in changing groups.
- Determine when to be a leader or a follower depending upon what is necessary to get a job done.
- Show sensitivity to the needs of women and ethnic and racial minorities.
- Be loyal to a group.

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"Through this program a person can up-grade in math, spelling, reading and physical training, plus open the door to better job skills."

-Bill, Participant

DEVELOPMENT OF INDIVIDUAL EDUCATION PLANS

Jorie Philippi

Suggested Procedure

1. Conduct in-person interview and review program entrance records to determine participant's targeted job areas. (See sample interview questions which follow.)

2. Obtain, if available from Military Occupation Specialties job descriptions (e.g., in AR-623-201), or develop critical performance criteria for each job by referencing Army manuals such as STP-21-1-SMCT, Soldier's Manual of Common Tasks, Skill Level 1.

3. Analyze each critical job task for use of basic skills applications (ie., how reading, writing and computation skills are used as an integral part of job performance by a competent soldier).

4. Develop a pretest that simulates the use of these basic skills applications in critical job performance tasks.

5. Administer a comprehension test (Cloze Test developed from military job print materials is recommended) to obtain a base-line reading grade level score for each participant and administer a standard math test that contains items representative of math skill applications used in performing military job tasks;

   or

   administer the standardized military BASE (Basic Army Skills Exam), available from Total Army Personnel Command-PDE, Army Continuing Education Services, Alexandria, VA.

6. Develop instructional materials and presentations to teach the basic skills applications tested with the job simulation pretest items. Select specific skill building exercises to supplement the instruction you develop to teach job applications of basic skills.

7. Based on the participant's performance on the pretest and his or her estimated total reading and math abilities, develop an IEP that matches instructional materials to the participant's areas of learning goals.

8. Provide instruction in accordance with the participant's IEP for a predicted number of hours required to achieve skills mastery.

9. Posttest at course completion with: a) a parallel version of the job simulation pretest and; b) standard basic skills tests or the standardized military BASE test.

Conducting A Learner Interview

It is important to set instructional goals with the learner so that their personal needs are met by the program. The best way to do this is by gathering information from the learner in an interview. During the interview, you should try to find out:

what kinds of everyday or work activities the learner performs regularly,

why they want to improve their literacy skills, and

what they perceive as their own strengths and weaknesses, particularly in applications of processing and enabling skills needed to perform military job tasks competently. (See list contained in IEP [Sample 4] for skills details.)

Sample Interview Questions

(The sample questions are about a learner's job experiences; commonly performed everyday activities could be substituted for this.)

1. What jobs have you had? Please describe to me the kinds of tasks you performed. Which job did you like best? Why?

2. How long were you employed on the job you liked best? What were your dates of employment there?

3. How did you learn this job?

4. How important are reading, writing and math to successful performance of the job you liked best?

5. What kind of job do you hope to have with the Army? How important do you think reading, writing and math will be to successful performance of this job? Can you think of any specific ways you might use reading, writing and math while performing duties for this MOS (Military Occupation Specialty)? Do you think these requirements will change in the future if new equipment is brought in?

6. What was the most challenging part of one job you held in the past? What could go wrong if you didn't do this part of your job correctly?

7. What do you think will be the most challenging part of the MOS you choose in the Army? What do you think might go wrong if you didn't do this part of the job correctly?

8. What books, manuals, forms or charts did you use in order to do your past job? What kinds of materials do you think soldiers use to perform the MOS you will enter?

9. Which of these materials is, or do you think will be, the hardest for you to use/read?

10. How often did/do you have to use this (manual, chart, book, form, etc.)?

11. If you were training a new person to do this part of your past job, what would he/she have to know before you could teach him/her?

12. What would a person who was learning how to do your past job find most challenging about learning it?

13. What kinds of written messages did/do you think you will read in your job/MOS?

14. What kinds of math do you/did you think you will do in your job/MOS?

15. What kinds of equipment or tools did/do you think you will use to do your job/MOS? Would you describe it for me? (What does it look like, how does it work, what does it do?)

16. What special measuring tools did/do you think you will need to read/use to do your job/MOS?

17. What computer equipment or tools or machines did/do you think you will use to do your job/MOS?

18. In which parts of your past job would you have liked to improve?

19. What skills would you have needed to learn in order to be promoted to or qualify for a different or better job (or perform an activity better or on the next level)? What kinds of skills do you think you will need to advance in the MOS you are targeting in the Army?

20. How did your past job change since you first started it?

21. Tell/explain to me, step-by-step, how you....

22. How did you know to do that?

23. What do you do if you don't find what you're looking for the first time while performing a job task?

24. Where else could you go for this information/for help?

25. What's the most important thing you want to learn how to do (or do better) during this course?

26. How will this help you in your MOS?

Performing Task And Concept Analysis For Development Of An I.E.P.

Analysis of reading applications in everyday life and on the job should be done at the task level because a task is the lowest level of behavior that describes the performance of a meaningful function. The task is described in terms of performance behaviors on everyday or work activities. The activities that make up the procedures are the elements within the task. The elements of a task describe exactly how a task is performed. The main objectives of such an analysis are:

1. to identify the technical aspects of the actions a learner performs in a functional setting.

2. to identify the prerequisite reading competencies (skills and knowledge) whose attainment allow a student to perform the technical aspects of the everyday or job tasks.

The method of data collection for the analysis is a review of printed materials used to perform the task, combined with information from on-site observation/interviews of competent performers of the task. To conduct a Literacy Task Analysis, you will need to complete the procedure below.

Analysis Procedure

1. Identify critical tasks from learner interview. These will be everyday work or non-work activities that the learner needs to perform regularly.

2. Observe a competent performer of the critical tasks in action. During the observation, ask the performer questions that give you information about the mental processes they are going through to perform the task. (Examples: "How do you....?" or "Could you please show me how you....?" or "Suppose you had to teach me how to do this. What are the most important things I'd have to learn? What would you teach me first? Why?" and so on.) You may need to observe 2 or 3 competent performers of the same task to abstract the entire mental processing that is required to perform the task because competent performers tend to develop personal "short-cuts".

3. Obtain copies of printed materials used to perform the task you observed/interviewed. If filled-in forms are used, get a copy of one that is filled in and an extra copy that is blank. This will allow you to create instructional exercises that simulate the actual use of the form.

4. Review the collected printed task materials (Samples 2 and 3) and your notes to familiarize yourself with the materials and goals. In other words, do your "homework" to orient yourself to the activities, environment, tools and equipment for the task.

5. Screen the printed task materials for problematic tasks for learners that are also necessary to perform the task.

6. Sequence and prioritize the tasks selected for instructional materials development. How difficult are they? How often are they used? What are the points of difficulty within the mental information processing that goes on during performance of the task? You may need to check back with a supervisor or with the competent performer(s) you observed/interviewed to help you determine these facts.

7. Break down major tasks into steps, substeps and single behaviors; identify the required reading, writing and computation processes employed for each. Refer to the menu of competencies for a general framework to guide your identification of processes.

8. Analyze each task behavior to determine what fact or concept students need to know or learn to perform it.

9. Document the tasks and reading, writing, computing processes embedded in each. These are used as instructional objectives and illustrate the direct connection to the task performed. Refer to the sample literacy task analysis documentation (Sample 1) and resulting sample I.E.P. (Sample 4) for format.

10. Categorize the functional tasks by the reading, writing, computing processes needed to perform the task. This will help you design your sequence of instruction related to each task. It will also help you to cross-reference the instructional lessons you create and integrate them with skill materials you may already be using or planning to use.

11. Collate printed functional task materials with the reading, writing, computing processes you have identified. This will enable you to build a file of personal "raw resource" task materials for each learner from which you can develop instructional lessons mastering processes listed in the I.E.P.

SAMPLE 1

Military Literacy Task Analysis

Sample Military Literacy Task Analysis

MOS: 75 B, 75 C, 71 L Unit Clerks
Job Task: Entering SIDPERS Information

Job Subtasks	Literacy Skill Applications
1. Receive information from source document such as copy of disposition, certificate of achievelment, personnel folder, pending action, etc.	1.1 Knowledge of technical vocabulary and acronyms. 1.2 Scan to locate information. 1.3 Identify details. 1.4 Using multiple sources of information. 1.5 Locating information on completed forms.
2. Enter information on Personnel Strength Balance Sheet (C-27) as job aid before entering information into computer to keep track of unit strength.	2.1 Knowledge of technical vocabulary. 2.2 Transferring information to appropriate sections of form. 2.3 Cross-referencing items. 2.4 Organizing information from multiple sources.
3. Look up type of transaction and procedure for each type of entry in DA PAM 600-8-1.	3.1 Knowledge of technical vocabulary. 3.2 Using an index. 3.3 Scanning for information. 3.4 Categorizing information. 3.5 Cross-referencing information.
4. Enter data into computer following procedures. Information on Personnel Strength in different order than on computer for entry. Computer screen gives opportunity to check accuracy of entries (TACCs system field computer checks information automatically. LAN line is manual system; need to know procedures for these.	4.1 Knowledge of technical vocabulary. 4.2 Identifying details. 4.3 Following sequential directions. 4.4 Index skills-locating pages, sections. 4.5 Transferring numbers, codes, data, onto appropriate sections of forms.
5. When transaction is completed, generate hard copy as proof of entry. Save until confirmation received form SIDPERS. Depends on base 38-15 as manual proof of total transactions. LAN line generate computer sheets.	5.1 Following written procedures. 5.2 Filing of information.
6. P-11 shows entries and error messages. Need to check errors, referring to DA PAM 600-8-1 Different categories of errors require different actions. Error mnemonics are a problem.	6.1 Knowledge of technical vocabulary. 6.2 Scan for organization and info. 6.3 Using appendices 6.4 Apply information from chart to locate malfunction and select corrective actions. 6.5 Compare/contrast. 6.6 Distinguish between relevant/irrelevant information.
7. Error resolution-follow procedures for corrections, check files, or problem solve to determine source and how to get accurate information. Need to know how to access info. from 201-2 file/personnel record or most likely source of error. Repeat process.	7.1 Knowledge of technical vocabulary. 7.2 Skim to locate information. 7.3 Using charts to problem solve. 7.4 Using multiple sources. 7.5 Compare/contrast. 7.6 Cause and effect.

(Prepared by Performance Plus Learning Consultants, Inc. under Army Contract MDA903-90-C-1090, August '90- February '91.)

Sample Military Literacy Task Analysis

MOS: Monitor, Motor Sgt.- Clerk fills out paperwork
Job Task: AOP - Army Oil Analysis Program

Job Subtasks	Literacy Skill Applications
1. Based on computer printout and regulations determine which vehicles are due for oil analysis (vehicles vary from 30 days to 1 yr.)	1.1 Knowledge of technical vocabulary. 1.2 Reading charts- skimming for information.
2. Take samples.	2.1 Following written procedures.
3. Fill out form 2026 to enter new vehicles into AOP program- drops and routine samples.	3.1 Transfer information to appropriate form. 3.2 Using multiple sources of info. 3.3 Selecting relevant information.
4. Attach form 2026 to sample and send.	4.1 Following written procedure.
5. 2026 DAta sheet sent back will record what has been done and what needs to be done. Determine if there are errors or what mainteneance or repairs are required.	5.1 Reading charts-skimming for relevant information. 5.2 Determine if there is a problem by drawing conclusions. 5.3 Use of multiple sources for reference. 5.4 Application of information to recognize defects and troubleshoot.
6. If problem exists, follow procedures outlined on 2026-- fix or send to be repaired, take new oil sample.	6.1 Follow written procedures.
7. Complete new report for AOP- fill out 2026 describing what has been done; if sent for repairs, fill out appropriate forms.	7.1 Enter information accurately onto form. 7.2 Following procedural directions.

(Prepared by Performance Plus Learning Consultants, Inc. under Army Contract MDA903-90-C-1090, August '90- February '91.)

Sample Military Literacy Task Analysis

MOS: PLL, Clerk, Motor Pool
Job Task: Requesting Parts

Job Subtasks	Literacy Skill Applications
1. Receive form sucha s 247-1 form mechanic on part needed.	1.1 Skim for relevant information.
2. AMDEF the part-look at inventory by part or stock number, what parts unit already has or needs and look for most current stock number by referencing MCRLs 1,2, or 3 and monthly AMDEF.	2.1 Knowledge of technical vocabulary. 2.2 Using an index. 2.3 Following directions. 2.4 Skimming for relevant information. 2.5 Cross-reference across materials. 2.6 Using charts to locate information. 2.7 Compare/contrast-selecting parts of text and combining information. 2.8 Selecting appropriate course of action 2.9 Transferring info from multiple sources to appropriate sections of form.
3. Fill out request form 2765-1 and send to Technical Supply.	3.1 Following procedural directions. 3.2 Transferring info onto form accurately.
4. Register order request in log (2064).	4.1 Transferring info. accurately onto form.
5. Receive CANN status from Technical Supply --tells whether requisition has been accepted and approximate date order may be picked up.	5.1 Skim for relevant details. 5.2 Drawing conclusions. 5.3 Predicting outcomes.
6. Check status card in bin at Technical Supply daily for status of request for part.	6.1 Skimming for relevant details. 6.2 Following procedural directions.

(Prepared by Performance Plus Learning Consultants, Inc. under Army Contract MDA903-90-C-1090, August '90- February '91.)

Sample Military Literacy Task Analysis

MOS: Motor Pool Dispatcher/ PAMMS clerk
Job Task: Utilization of Vehicles

Job Subtasks	Literacy Skill Applications
1. Operator requests dispatch utilization record. Dispatcher checks authorization and fills out procedure form.	1.1 Knowledge of technical vocabulary. 1.2 Skimming for relevant details. 1.3 Entering info. on form accurately.
2. Check ID,driver's license (different licenses required for different vehicles) and identification card of operator. (use 10-manual)	2.1 Knowledge of technical vocabulary. 2.2 Skimming for relevant details. 2.3 Compare/contrast 2.4 Combining info. from multiple sources.
3. Check equipment record form in vehicle folder. Driver performs PMCS and gives clerk list of any problems to be fixed or states that vehicle is to be checked out. If ok, dispatches vehicle.	3.1 Knowledge of technical vocabulary. 3.2 Skim for relevant details. 3.3 Transferring info to form. 3.4 Drawing conclusions.
4. Fill out utilization record (DD-1970) and Organizational control for equipment (DD 240-1).	4.1 Locate and transfer information to form.
5. When operator returns, check to see that maintenance check has been completed and complete forms with mileage, etc.	5.1 Following written procedures. 5.2 Locate information. 5.3 Compare/contrast 5.4 Determine presence of defects. 5.5 Enter info accurately onto form.
6. If there has been an accident, operator will fill out report. Dispatcher will notify Motor Sgt. of damage and repairs needed and will fill out forms 2401 and 1970.	6.1 Following procedural directions. 6.2 Compare/contrast 6.3 Drawing conclusions. 6.4 Entering info onto form accurately.

(Prepared by Performance Plus Learning Consultants, Inc. under Army Contract MDA903-90-C-1090, August '90- February '91.)

Sample Military Literacy Task Analysis

MOS: Training NCOs
JOb Task: Allocations for training

Job Subtasks	Literacy Skill Applications
1. Read mission statement, determine how many seats for classes, details for procedure.	1.1 Knowledge of technical vocabulary acronymns. 1.2 Drawing conclusions. 1.3 Calculating by whole numbers. 1.4 Reading comprehension.
2. Determine future leadership needs of company and potential personnel for promotion-- which courses needed.	2.1 Locating information needed. 2.2 Skimming and scanning. 2.3 Cross-referencing to select info. 2.4 Making inferences from multiple sources. 2.5 Compare/contrast--combining info., selecting parts of text needed, identifying similarities and differences. 2.6 Distinguishing between relevant and irrelevant info.
3. Request allocations-fill in allocations form.	3.1 Transfer data from written sources onto appropriate sections of form.
4. Administer required tests.	4.1 Follow written procedure. 4.2 Distinguish between relevant and irrelevant responses on forms. 4.3 Transfer info accurately onto form.
5. Inform personnel of procedures to be followed--determine personal needs of personnel and refer to appropriate source.	5.1 Identify details, written and oral. 5.2 Combine info from multiple sources 5.3 Distinguish between relevant and irrelevant information. 5.4 Apply preventative measures to minimize problems (predicting outcomes, cause/effect, decision-making) 5.5 Select appropriate course of action. 5.6 Cross-reference to select info. 5.7 Make inferences.
6. Put soldiers on promotion list after completion of interview with supervisors and Board (Need recommendation of supervisor and completion of PLDC)	6.1 Knowledge of technical vocabulary. 6.2 Following written procedure. 6.3 Locating and combining info. from multiple sources. 6.4 Transfer info accurately onto form.
7. When allocations arrive, determine who will go for training.	7.1 Prioritizing 7.2 Decision-making.

(Prepared by Performance Plus Learning Consultants, Inc. under Army Contract MDA903-90-C-1090, August '90- February '91.)

Sample Military Literacy Task Analysis

MOS: Supervisory NCO
Job Task: Scheduling Training and Writing Reports

Job Subtasks	Literacy Skill Applications
1. Schedule and coordinate training inspections and report when you will be providing training.	1.1 Knowledge of technical vocabulary. 1.2 Skim for relevant information from multiple sources. 1.3 Order and prioritize information. 1.4 Follow written procedures.
2. Publish training schedule.	2.1 Organize information into time order 2.2 Transfer info. onto form accurately.
3. Review check lists for inspectors.	3.1 Determine information need. 3.2 Use locator words to find information from multiple sources. 3.3 Identify details-- specifications.
4. Fill out/translate inspection form.	4.1 Compare/contrast-observations with established standard specifications. 4.2 Enter info onto form--record and summarize essential details. 4.3 Generate report using specified format.
5. Write follow-up of inspection.	5.1 Production of written words. 5.2 Locate relevant info. from multiple sources. 5.3 Transfer info accurately onto form. 5.4 Summarize essential details. 5.5 Order information/provide support information and details. 5.6 Cause/effect-- troubleshooting: determine problems and select appropriate action (problem-solving, predicting outcomes, drawing conclusions. 5.7 Appraise report and edit--compare/contrast, predicting outcomes, determining errors, drawing conclusions, selecting relevant/irrelevant info.
6. Write awards and recommendations.	6.1 Technical vocabulary production. 6.2 Organization of ideas. 6.3 Skimming and scanning to locate information from multiple sources. 6.4 Following written procedures. 6.5 Transferring info accurately onto forms 6.6 Summarizing and selecting details for documentation. 6.7 Appraise report and edit--compare/contrast, predicting outcomes, determining errors, drawing conclusions, selecting relevant/irrelevant information.

(Prepared by Performance Plus Learning Consultants, Inc. under Army Contract MDA903-90-C-1090, August '90- February '91.)

SAMPLE 2

Suggested Resource Materials

Suggested Materials to Consult and/or Use in Preparation of Pre-Military Development Program Instructional Materials

FM 100-1	The Army
FM 25-100	Training the Force
FM 22-100	Military Leadership
FM 22-103	Leadership and Command and Senior Levels
FM 22-600-20	The Army Noncommissioned Officer Guide
FM 22-5	Drill and Ceremonies
FM 22-101	Leadership Counseling
FM 19-95B 2/3	Military Police MOS 95B
FM 11-92	Combat Communications within the Corps
FM 17-15	Tank Units
FM 21-5	Military Training Management
FM 29-12	Division Maintenance Operations
FM 21-26	Map Reading
FM 24-10	Combat Communications
FM 25-4	How to Conduct Training Classes
FM 3-4	NBC Protection
FM 3-5	NBC Decontamination
FM 3-3	NBC Contamination Avoidance
FM 3-100	NBC Operations
FM 3-12	Operational Aspects of Radiological Defense
Fm 24-18	Tactical Single-Channel Radio Communication Techniques
FM 26-2	Management of Stress in Army Operations
FM 27-14	Legal Guide for Soldiers
FM 21-15	Care and Use of Individual Clothing and Equipment
FM 17-30	The Armored Brigade
AR 350-17	NCO Professional Development
AR 30-1	The Army Food Service Program
AR 350-17	Noncommissioned Officer Development Program
DA PAM 600-67	Effective Writing for Army Leaders
DA PAM 623-205	The Noncommissioned Officer Evaluation Reporting System "In Brief"
DA PAM 351-20	Army Correspondence Course Program Catalog
DA PAM 6-8-1	Standard Installation/Division Personnel System (SIDPERS) Battalion S1 Level Procedures
DA Cir 25-89-3	Update, Contemporary Military Reading List
DA PAM 600-65	Leadership Statements and Quotes
STP 21-1 SMCT	Soldier's Manual of Common Tasks 1
STP 5-12B1-SM	Combat Engineer Soldier's Manual
STP 7-11BCHM14-SM-TG	MOS 11B, 11C, 11H, and 11M Infantry
STP 5-52C13-SM-TG	Utilities Equipment Repairer
STP 9-63B35-SM-TG	MOS 63B Soldier's Manual Training Guide
STP 9-52D3-SM-TG	MOS 52D Soldier's Manual Training Guide
STP 21-24-SMCT	Soldier's Manual of Common Tasks 2-4
TM 43-0001-46	Army Tools and Equipment Data Sheets
PB 34-90-2	Military Intelligence, April-June 1990
	NCO Call, March-April 1990
	Action Plan: Noncommissioned Officer Leader Development, Task Force, October 1989
	A Strategic Force for the 1990's and Beyond
	Soldier's Scene, March-April 1990
	Sergeant's Business, January-February 1990; February 1986
	Officer's Call, May-June 1990
	Army Training Brochure
	Quotes for the Military Writer/Speaker, 1989
	Military Correspondence Courses, Army Education Center,

Ft. Belvoir, VA

Information Handbook, U.S. Army Sergeant Major Academy, Ft. Bliss, TX

Promotion Study Guide, Army Education Center Ft. Belvoir, VA

Adjutant General's Corps Noncommissioned Officer Professional and Recommended Reading Program, March 1990

SAMPLE 3

Applications of Skills

Applications of Reading Skills Found in the Workplace

Vocabulary:

- Recognizing common words and meanings, task-related words with technical meanings, and meanings of common abbreviations and acronyms.

Literal Comprehension:

- Identifying factual details and specifications within text, following sequential directions to complete a task, and determining the main idea of a paragraph or section.

Locating Information Within a Text:

- Using table of contents, index, appendices, glossary, systems or subsystems.
- Locating pages, titles, paragraphs, figures, or charts needed to answer questions or solve problems.
- Skimming or scanning to determine whether or not text contains relevant information.
- Cross-referencing within and across source materials to select information to perform a routine.
- Using a completed form to locate information to complete a task.

Comparing and Contrasting:

- Combining information from multiple sources that contribute to the completion of a task.
- Selecting parts of text or visual materials to complete a task.
- Identifying similarities and differences in objects.
- Determining the presence of a defect or extent of damage.
- Classifying or matching objects by color, size, or significant marking.
- Distinguishing between relevant and irrelevant information in text or visuals.

Recognizing Cause and Effect; Predicting Outcomes:

- Using common knowledge for safety.
- Applying preventative measures prior to task to minimize problems.
- Selecting appropriate course of action in emergency.

Using Charts, Diagrams, Schematics:

- Reading two- or more column charts to obtain information.
- Locating chart information at intersections of rows and columns.
- Cross-referencing charted material with text.
- Applying information from tables or graphs to locate malfunctions or select actions.
- Using flow charts and organizational charts to sequence events, arrive at a decision, or problem solve.
- Identifying components within a schematic.
- Isolating problem components in schematics, tracing to cause of problem, and interpreting symbols.
- Identifying details, labels, numbers, parts of an illustration, parts from a key or legend.
- Following sequenced illustrations as a guide.
- Interpreting three dimensional drawings of objects for assembly or disassembly.

Inferential Comprehension:

- Determining meaning of figurative, idiomatic, or technical usage of terms, using context clues as reference.
- Making inferences from text; organizing information from multiple sources into a series; interpreting codes and symbols.

(Philippi, J.W.1988 Matching Literacy to Job Training: Some Applications from Military Programs. Journal of Reading, Vol. 31, No. 7, pp.658-666. Newark, DE: Intl. Rdg. Assoc.)

Applications of Writing Skills Found in the Workplace

Production :
- Writing key technical words accurately on forms
- Spelling task-related words and abbreviations correctly.

Information Transfer (Single Step/Source) :
- Entering appropriate information onto a form.
- Recording essential information that involves more than one sentence.
- Recording essential information in phrases or simple sentence form accurately and precisely

Information Transfer (Multiple Steps/Sources) :
- Transferring numbers, codes, dates, figures from equipment or written sources onto appropriate sections of forms.
- Writing a report including necessary support documentation or classification.

Translation :
- Writing brief, descriptive accounts of activities or transactions performed.
- Outlining a situation by identifying key ideas and supporting details.
- Summarizing essential details for a written communication, using a problem-solving or news-writing heuristic.
- Selecting relevant details for a written communication.
- Stating general impressions of an event or situations as they relate to specific reporting goals.
- Summarizing events and precise dialogue in an accurate, complete, and objective manner.
- Summarizing the major points presented in a written communication.
- Generating a written communication according to a specific format (e.g., memorandum, telex, or letter).

Extension/Interpretation :
- Identifying objectives, intent, target audience, and all essential and supporting details of a written communication.
- Generating a written communication, arranging events sequentially.
- Writing brief justifications for actions taken and providing good reasons for rejecting alternative actions.
- Appraising a written communication and making adjustments to improve clarity.

(Compiled from studies by Mikulecky, 1982; Mikulecky, Ehlinger, & Meenan, 1987; U.S. Army, 1988; Philippi,1988 . Source: Philippi, J.W. 1989 Basic Skills in the Workplace, in Nadler, L. and Nadler,Z., eds., Handbook for Human Resource Development. Second Ed., College Park MD: J.Wiley & Sons. In Press.)

Applications of Computation and Problem-Solving Skills in the Workplace

Performing Whole Number Operations
•Reading, writing, and counting single and multiple digit whole numbers to complete a task or subtask.
•Adding, subtracting, multiplying, and dividing single and multiple digit numbers to complete a task or subtask.
*Using addition, subtraction, multiplication, and division to solve problems with single and multiple digit whole numbers.
*Rounding off single and multiple digit numbers to complete a task or subtask.

Using Fractions
•Reading and writing common fractions to complete a task or subtask.
*Adding, substracting, multiplying, and dividing common fractions to solve problems.

Using Decimals
•Carrying out arithmetic computations involving dollars and cents.
•Reading and writing decimals in one and more places to complete a task or subtask.
*Rounding off decimals in one and more places to complete a task or subtask.
*Adding, substracting, multiplying and dividing decimals in one and more places to solve a problem.

Using Percents
•Reading, writing, and computing percents to complete a task or subtask.

Performing Mixed Operations
*Converting fractions to decimals, percents to fractions, fractions to percents, percents to decimals, common fractions or mixed numbers to decimal fractions, and decimal fractions to common fractions or mixed numbers to complete a task or subtask.
*Solve problems by selecting and using correct order of operations.
•Computing averages, ranges or ratios to complete a task or subtask.

Measurements and Calculation
*Reading numbers or symbols from time, weight, distance, and volume measuring scales.
*Using a measuring device to determine an object's weight, distance, or volume in standard (English) units or metric units.
*Performing basic metric conversions involving weight, distance, and volume.
*Using a calculator to perform basic arithmetic operations to solve problems.

Estimations
*Determining if a solution to a mathematical problem is reasonable.

[*Indicates skills directly involved with using problem-solving strategies or interpretation.]

(Compiled from studies by Greenan, 1984; Philippi, 1988. Source: Philippi, J. W. 1988. Job Literacy: Computation and Problem Solving. Report for U.S. Department of Labor and American Society for Training & Development. Alexandria, VA: ASTD

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SAMPLE 4

Individual Education Plan

University of Mississippi- Center for Pre-Military Development

Individual Education Plan

To the Learner: I understand that I am enrolled in a pre-military course designed to help me with occupational basic skills applications and to improve my potential for achieving qualifying scores on the ASVAB and preparing for competent performance of military job tasks. Because these goals are are important to me, I agree

- To attend each session, and
- To be an alert, active participant in my learning program.

Learner's Signature ______ Date ______

To the Instructor By the third session, I will prescribe the skill objectives appropriate to the learner's pre-military development needs and I will begin to assign in detail the materials needed to master those objectives. I will be sure that this Individual Education Plan is based on the learner's personal and employment literacy needs, and that it matches his or her ability level.

Every fifteen hours during this course of study I will review the learner's progress and motivation. The learner and I will document that review, evaluate, and confirm or adjust the learner's goals for the next fifteen hour period of the contract. At the end of the course, I will prepare a final evaluation of the learner's progress for use in future educational endeavors. The final evaluation will list any skill objectives remaining to be completed and a recommendation for future study.

Teacher's Signature ______ Date ______

To the Administrator: I have reviewed this IEP and have found that it meets both the learner's needs and my own recommendations.

Administrator's Signature ______ Date ______

COMPETENCY OBJECTIVES

Diagnostic/ or Pretest

A. **PROCESSING SKILLS**

Procedural directions and Prose
- locating information/facts
- sequencing/organizing facts
- understanding essential ideas

Using Visuals
- pictorial details/cross sections
- interpreting symbols
- 2- and 3+ -column charts
- completed forms
- schematics and diagrams
- flow charts
- table of contents (e.g. manual)
- index (e.g. manual, catalog)
- glossary
- use of multiple sources

B. **MORE COMPLEX PROCESSING SKILLS**

Using Inferences
- drawing conclusions
- relevant/irrelevant information
- compare/contrast
- combining information from multiple sources
- summarizing/paraphrasing

Problem-solving Strategies
- recognizing cause and effect
- predicting outcomes
- decision-making
- prioritizing

C. **RELATED ENABLING SKILLS**

Mathematical Computation
- whole number functions
- negative numbers
- fractions
- decimals
- percents
- use of formulas
- estimating
- graphing
- statistics
- use of a calculator
- metric/English conversions
- measurement/gauges

ASSIGNMENTS

Mastery 80%	
Score	Date

REVIEWS/ EVALUATIONS

15-hour Teacher/Learner Review: Date

Hours Absent ____

	Progress	Attitude
Still needs Improving	____	____
Satisfactory	____	____
Outstanding	____	____

Teacher ____________ Learner ________

30-hour Teacher/Learner Review: Date

Hours Absent _____

	Progress	Attitude
Still needs Improving	____	____
Satisfactory	____	____
Outstanding	____	____

BEST COPY AVAILABLE

Writing
spelling task-related words
entering appropriate information onto a form
recording essential information in phrases or sentences
writing a report with support documentation/justifications
writing brief descriptive accounts
selecting appropriate details
summarizing events objectively
generating a communication in a specific written format
appraising a written communication and editing to improve clarity
notetaking

Reading
Phonetic Analysis
beginning consonants
- single
- blends/diagraphs

final consonants
- single
- blends/diagraphs

vowels
- long
- short

syllabication
use of pronunciation key
Structural Analysis
root words
prefixes
suffixes
WordKnowledge
synonyms
antonyms
words in context
words classification
mnemonic devices
acronyms/abbreviations
multiple meanings
figurative/technical terms

Teacher__________ Learner__________

45-hour Teacher/Learner Review: Date

Hours Absent _____

	Progress	Attitude
Still needs Improving	________	________
Satisfactory	________	________
Outstanding	________	________

Teacher __________ Learner __________

Final Evaluation: Date

IEP Completed __________

Develop New Contract __________

Teacher __________

> *"I would recommend this program to anyone who is seriously wanting to go into the "armed services."*
>
> -Jack, Participant

CAREER COUNSELING RESOURCE CENTER RECOMMENDATION

Joyce F. Kinnison

Introduction

Today the Department of Defense is raising its standards for enlistees because of the emphasis on high-technologies and the mass utilization of high-technology equipment in the military. Therefore, it is necessary for the military services to recruit young people who are able to learn high-tech skills and are motivated to finish their formal schooling.

The model for pre-military development is designed to help young people and their parents "recognize the military's professional status as a viable and respected career option for both men and women" and prepare our youth to qualify for such a career. The component of the model that this paper addresses is the design of a career counseling resource center for participants.

One group of students the model is targeting include those who are interested in a career in the services but whose educational backgrounds are so weak they are unable to achieve a qualifying score on the appropriate battery of tests to enter the military services. It is recognized that these young people usually have no solid or realistic career goals. This situation can be ameliorated through the availability and utilization of a well-organized and functional career counseling resource center designed and operated to motivate its clients to upgrade, improve, enhance, and succeed in their education endeavors. And many will succeed in this if they have goals and valid reasons to improve their academic and vocational performances.

Another target group for the model includes pre- and post-military personnel and civilians. This is an appropriate group to target since career development is now viewed as a lifelong process for an individual, with a series of transitions that result from both environmental changes and personal growth. It has been planned that participants, and especially those in this group, will "participate in intensive life coping/work skills training." The plan states that the career counseling resource center will offer activities and approaches to assist people to "deal effectively with career and other changes." This includes planning for and managing career transitions, developing job applications and personal resumes, and preparing for and handling successful job interviews.

The career counseling resource center will provide career development services to meet the specific needs of all target groups, and this requires careful planning.

An essential first step is to identify the needs of the special groups who will be using the center. After the initial needs assessment has been made, the next step is to establish objectives for the center that can support client needs. After the objectives have been established, it is necessary to decide on what approaches, activities, assistance, and services will be incorporated in the operations of the center to support the clients and the objectives.

This paper is the start of these efforts.

The second section of this paper addresses planning and designing the career counseling resource center, including suggestions for establishing objectives, overall planning, physical setup, staffing, and start-up and budgets.

The third section addresses the implementation of the career counseling recourse center and focuses on staffing needs and responsibilities and appropriate activities for the center. These activities include career counseling and career decision making, self-directed activities, individual and group counseling and assessment, individual and group meetings, planning and managing career transitions, job getting and job keeping skills, placement, retraining for military separators, and mini courses on career development. In addition, some suggestions are made for promoting the center and, where appropriate, coordinating with other career development services.

The fourth section of the paper provides suggestions concerning appropriate types of resources for the career counseling resource center. These include print, video, and computer systems. Materials will fall into definite categories of activities, such as those to support career exploration, career assessment, career decision making, employment getting and keeping skills, placement-activities, career transition, and others. A list of materials to be considered is included.

Planning The Career Counseling Resource Center

An effective career counseling resource center should serve as a focal point for many different kinds of career development activities and provide easy access to a wide variety of information, activities, and systems that support career exploration, decision making, goal setting, career implementation, career transitions, and life and career skills delivered through appropriate media for the clients of the center.

To accomplish this, careful planning before actual implementation and operation of the career counseling resource center is essential. Planning strategies include determining the needs of clients, establishing objectives for the center, and designing the center to meet the needs and support the objectives.

Needs And Objectives

Career counseling and development programs and services should be fashioned to respond to individual needs, readiness, and motivation and to help prepare people for successful entry into and participation in the world of work.

University of Mississippi staff, through the preparation of the proposal for the model for pre-military development, have already identified the characteristics and some career development needs of groups who will be using the career counseling resource center. This will lead to the establishment of purposes and objectives for the center.

Brown and Brown (1990) suggest that objectives for a career counseling center should identify (1) client career development needs that will be met by the center, (2) how the needs are to be met, (3) when the needs will be met, (4) the criterion of services, and (5) the method of evaluation.

A necessary prerequisite for creating participant interest and motivation in participating and succeeding in the career counseling resource center's activities is for them to have realistic career goals in career areas in which they are interested and for which they are suited. This could certainly be the overall objective for the center's clients.

Although it is not the purpose of this paper to develop specific objectives for the career counseling resource center, it is recommended that the project staff use the National Career Development Guidelines competencies for high school, postsecondary, and adult levels as one resource to assist them in establishing objectives. The competencies for these three levels represent the skills young people and adults need to develop that will enable them to make important life and career choices and help them as they mature in their own career development. They focus on three areas (self-knowledge, educational and vocational development, and career planning and exploration) that encompass the career development competencies individuals should have in order to explore, plan, prepare for, enter, and progress in a career in the most effective manner.

Design

After the needs of clients have been identified and the objectives have been established, an appropriate design for the center can be developed. This involves (1) planning the layout, (2) identifying staffing needs, (3) developing a budget, and (4) selecting materials, resources, equipment, and furnishings.

Layout

Certain considerations listed by Hubbard and Hawke (1987) should be addressed by the project staff before deciding on the actual size, location, and establishment of a career counseling center. They suggest the following topics concerning the location.

1. The location should accommodate the types of services and activities planned for the center. The should be adequate space for:

   a) Seating
   b) Work and meeting areas
   c) Furniture
   d) Audio-visual equipment and use
   e) Computer equipment and use
   f) Materials storage and use

2. There should be enough space for administrative offices, administrative and office equipment, records, etc.

In addition to these physical considerations, the center should be attractive, comfortable, inviting, easily accessible, non-threatening, and away from areas of high noise. After the location has been decided upon, some remodeling may be needed to provide the space and atmosphere that can contribute to the success of the center.

Hubbard and Hawke (1987) suggest the questions that should be answered concerning the design and layout of the center before deciding on the actual location and planning the layout:

1. Will the location accommodate the types of services planned for the center?

2. Will the setting provide enough space for seating?

3. How much and what kind of use is the center expected to get?

4. Is there enough room for required furniture?

5. What kind of space will be needed for audio visual equipment and computer hardware and software?

6. How much growth is expected for the collection of resources in the next several years?

7. Does the location satisfy the needs of individuals with handicapping conditions?

8. What type of accommodations, such as offices, equipment, and desks, is desirable for staff?

9. Are meeting rooms required? What type?

10. Is space needed for workshops, seminars, classes, or other group programs?

11. Will space be available for viewing audiovisual materials?

For the purposes of the career counseling resource center, it is recommended that there be adequate space for offices, electrified study carrels, computers and printers, video viewing by individuals and groups, seats for large group discussions, areas for small group discussions, filing cabinets and storage cabinets for equipment and materials, bookshelves for print materials, administrative files and records, and a work and storage room.

A space with 400 to 500 square feet would probably be adequate to provide room for the above, but the actual size should be determined during this phase based on needs and availability.

Staffing

Several approaches to staffing the career counseling resource center are possible. The actual staff configuration will depend to some degree on the services offered, the layout of the center, and budget.

To provide guidance for deciding on appropriate staff and staff responsibilities for the center, sample position descriptions for a director, career counselor, career counseling technician, and secretary/receptionist are included in section III.

It is suggested that during the planning and early implementation phases for the center a director or career counselor along with a clerical support person will be needed. The first action is to appoint a temporary director or, if plans have progressed satisfactorily to this point, to hire a director. It will help move the planning and implementation of the center along more smoothly if there is someone with the responsibility of overseeing all the operations. It is possible that the director could be less than full-time, with other responsibilities in the model pre-military development program or in student personnel services.

It is suggested that the following staffing pattern be considered as minimum for the latter implementation and initial operational phases of the center:

- Professional Level Staff
  - Director (full- or part-time)
  - Career Counselor (full-time)

- Para-professional Level
  - Career Counseling Technician (full-time)

- Clerical Support Level
  - Secretary-Receptionist (full-time)

Subsequent year staff requirements will depend on the services offered and the hours the center is open.

Budget

Early in the design phase it is advisable to prepare and gain approval for the operational budget for the career counseling resource center.

Brown and Brown (1990) suggest that the basic costs for operating and managing the center will depend on the cost and/or availability of the following:

1. Space
2. Hours of operation
3. Staffing (salaries and fringe benefits)
4. Furniture and equipment
5. Materials
6. Travel and per diem costs for staff and consultants
7. Copying, office supplies, etc.
8. Postage and local and long distance telephone

Following are some considerations to be weighed in establishing costs for the above categories:

1. Remodeling costs will depend on the current condition of the space to be used for the center.
2. Salaries will be dependent on local and institutional salary scales.
3. Furniture and equipment costs can be ascertained by checking catalogues, office supply stores, computer and audiovisual equipment vendors, and others sources.
4. Costs of materials and resources can be estimated by using some of the information in the section IV, contacting other centers to discover their costs, and obtaining costs from vendors, publishers, and catalogues.
5. Travel, communication, and supplies costs can be estimated on the basis of other operations within the program and institution.

In developing a budget, it is advisable to prepare both a startup budget and an operating budget. The start-up budget might include:

1. Remodeling costs
2. Salaries and fringe benefits

3. Furniture and equipment

4. Career counseling materials and software

5. Administrative software, such as word processing and desk top publishing

6. Operating expenses during the planning and early implementation phases

The operating budget could include:

1. Rental of space (if applicable)

2. Staff salaries and fringe benefits

3. The cost of adding to, replacing, and repairing furniture and equipment

4. The cost of purchasing, renewing, and replacing materials, including print, computer software, video products, etc.

5. Replacement and upgrade of administrative software, such as word processing and desk top publishing

6. Travel and staff development costs

7. Cost of office supplies, copying, etc.

8. Postage, telephone, and other communications costs

9. Promotional activities

Obviously the operating budget for the center will depend on decisions made during the planning phase regarding space, furnishings, staff, types of materials and equipment, and services and activities to be offered by the center.

Materials

Determining the needs of the center's clients, establishing objectives for the program, designing useable and attractive facilities, determining staffing needs, and preparing budgets are essential steps leading to implementation of the model program's career counseling resource center. However, the ultimate success of the center will depend to a large degree on the type and quality of career resources available. These must meet the needs of the target groups and motivate them to utilize the center.

A selection policy should be developed to guide the acquisition process before career resources are purchased. The following questions about materials could be answered, along with other questions that have relevance for the specific services and activities of the center.

1. Do the materials support the objectives of the center?

2. What formats are appropriate for the clients, i.e., print, computer-based, videotape, videodisc, other?

It is important to insure that all materials, regardless of type, are selected carefully so they are useful and useable by the center's clients. There are guidelines to use in evaluating materials. Brown and Brown (1990) suggest that materials selected for the center should be:

1. Current and up-to-date
2. Accurate
3. Authoritative
4. Attractive
5. User-friendly, easy to use
6. Readable, appropriate reading level
7. Free of sex bias
8. Free of racial-ethnic stereotyping
9. Comprehensive
10. Well-organized

After materials have been identified and evaluated, it is important that enough time be allocated for the acquisition process, including the initiation and approval of paperwork within the institution.

Detailed discussions of types of materials, sources of materials, and materials available in Mississippi are included in Resources for the Career Counseling Resource Center.

Implementing The Career Counseling Resource Center

After the needs of the center's clients have been validated, objectives for the program established, facilities designed, staffing needs determined, budgets prepared, and materials identified, evaluated and ordered, it is time to turn full attention to implementing the career counseling resource center. Obviously many of these steps are overlapping and one step need not be completed before the next one begins.

Some of the topics that were discussed briefly in previous sections of this paper will be examined in light of implementation on the following pages. These include staff responsibilities, center activities, promotion, coordination with related programs, and a list of contacts for related services in Mississippi.

Staff Responsibilities

Examples of staff responsibilities for the center director, career counselor, career counseling technician, and secretary/receptionist are included here to provide assistance in determining staff assignments and developing position descriptions.

Director of the Career Counseling Resource Center

The director of the career counseling resource center should have experience managing a career counseling center, student personnel services, or similar program. The director could be half-time, at least at the beginning, with other duties in the model for pre-military development program or student personnel services. Sample responsibilities are listed below:

1. Manage all center activities and operations
2. Promote the center with appropriate groups
3. Coordinate center activities with the overall goals of the model for pre-military development
4. Assign staff responsibilities and manage staff
5. Prepare and manage the budget
6. Coordinate courses offered through the center
7. Identify and coordinate with other career development services as appropriate

Career Counselor

The career counselor should be a career counseling professional with at least a masters degree in student counseling and personnel services or a closely related field. It would be preferable to have someone who has experience working with the type of clients the center will serve. It is always helpful for career counselors to be credentialed as a National Certified Career Counselor.

1. Administer and interpret career assessment instruments
2. Counsel participants
3. Plan and conduct individual and group counseling sessions
4. Plan and conduct career exploration and decision making sessions
5. Plan and conduct sessions on military careers, the military services as a career, and the relationship between military and civilian careers
6. Plan and conduct sessions on job-getting and job-keeping skills
7. Plan and conduct sessions on planning and making successful career transitions
8. Plan and conduct sessions that address transition and other issues and needs for military separators
9. Plan and conduct sessions on placement activities
10. Work with participants to develop and implement individual career plans

11. Plan and present (or arrange presentation of) special career-related programs for participants and their families

12. Work with the director to develop newsletters and other publications that promote the center, provide information on its services and activities, highlight military careers, give anecdotal information about current happenings, etc.

Career Counseling Technician

It would be preferable to employ a Career Counseling Technician who has completed a library assisting program or similar program in a vocational/technical school and who has work experience in a counseling and/or education setting. This person should be familiar with computer technologies, have good interpersonal and communications skills, and exhibit a high level of organizational ability.

1. Conduct client orientation to the center

1. Collect and organize materials for the center

3. Help participants locate and use materials

4. Help participants use computer-based systems

5. Help participants use career audio-visual materials

6. Catalog and maintain career materials in the center

7. Work with the career counselor to help clients develop and implement individual career plans

8. Review materials and make recommendations for acquisitions

9. Maintain displays and bulletin boards in the center

Secretary/Receptionist

It would be preferable to have a clerical support person who has completed a vocational/technical program in secretarial sciences and is familiar with word processing, desk top publishing, and computer technologies. In addition to basic clerical and secretarial skills, this person should have good interpersonal and communications skills, a good command of language, and good organizational ability.

1. Keep career records on participants

2. Keep records for the center

3. Maintain files on all administrative materials

4. Maintain files of catalogues, brochures, and other career materials

5. Handle incoming and outgoing correspondence
6. Assist in scheduling the center's use
7. Type and print newsletters and other center materials
8. Answer the phone, give information to callers, route calls, and take messages
9. Order and track orders for supplies, materials, equipment, etc.
10. Perform other clerical duties associated with the efficient maintenance and operation of the center

Career Center Activities

Relevant career development activities for the center include career counseling and career decision making, self-directed career development, individual and group counseling and assessment, individual and group meetings, planning and managing career transitions, job getting and job keeping skills, placement, career services for military separators, and mini courses on career development.

As was stated earlier, a necessary prerequisite for creating interest and motivation in participating and succeeding in the above activities is for the clients to have realistic career goals in career areas in which they are interested and for which they are suited. This can be assisted, as specified in the proposal, by the creation of an "individual career plan for each participant in the fully implemented model" that encourages "each participant to make decisions and choices regarding his/her short-range and long-range career plans."

The steps outlined below address student and adult career development needs. Career exploration and decision making activities include both individual and group sessions and incorporate a variety of resources. Of course, the beginning point for clients vary with the career maturity of the individual.

It is important to remember that clients cannot make good career decisions on the spur of the moment without adequate self analysis of personal and career preferences and needs and without good information about career options. Because of this, they should proceed through the following steps:

1. Analyze their own needs and abilities
2. Investigate careers that will most nearly match their needs and allow them to utilize their abilities
3. Determine the avenue(s) that will prepare them for such a career.

Activities to accomplish this fit into the following categories:

1. Self-analysis
2. Career exploration
3. Career decision making, goal setting, and career implementation

Self-Analysis

The beginning of career development is accurate information about the individual. Therefore, self-analysis is an appropriate starting point for all clients of the center, whether they are students who have no realistic career goals or adults who have military or other career experience. Depending on the clients' levels of readiness and understanding of career decision making, it might be necessary to use videotape materials (such as CEPP videos listed in the section entitled Video Material to introduce career exploration, decision making, interests, and/or aptitudes.

Self-analysis should make use of published and/or computer-based assessment instruments and self-assessment instruments that accompany many computer-based career information delivery systems. The use of assessment instruments enhances career development and provides a necessary starting point. Published and computer-based instruments include interest inventories and aptitude batteries, such as Self Directed Search, Interest Checklist, Armed Services Vocational Aptitude Battery, General Aptitude Test Battery, Discover What You're Best At: The National Career Aptitude System, and others. The center staff should make decisions concerning appropriate ones for their clients or they may decided to use an assessment instrument the institution already utilizes. Self-assessment instruments that accompany computer-based systems vary widely in quality and depth, depending on the system. The system that is suggested for use in the model program is Mississippi Choices, which has a very good Choices Guide and Personal Profiles for clients.

For military separators and other adults, it will also be necessary to determine transferable skills from past work experiences. This can be accomplished using a system like Choices CT (Choices for Career Transitions.)

Self-analysis activities can be individual, group, or a combination of both. Generally, it is more convenient to introduce the process in a group setting. Published assessment instruments can be administered in groups or individually whether a pencil and paper or a computer-based format is used. Computer system self-assessment instruments can be completed in groups or individually, depending on the needs of the students and the schedule of the center.

Staff should review with their clients the results of the assessment instruments after they have been completed (and scored if applicable.)

Career Exploration

Career exploration is the next step in the broad categories of activities and services the center should offer. Based on the results of assessment instruments, the counseling professional and/or para-professional can make a decision about (1) whether or not the client is ready to proceed with career exploration and (2) at what point the client should begin exploration.

For clients who are ready to proceed, the best place to begin exploration is through the explore route in a computer-based career information delivery system. After the client has been introduced to the computer and its operation, this process is a one-on-one between the client and the computer program. The counselor, para-professional, or clerical person should only be at the computer if there are questions or problems. The exceptions to this are clients who must have assistance because of their low reading levels or similar limiting situations.

After career exploration using the computer-based system has been completed, the system can provide a large amount of specific information about careers and point clients to other sources of information. Depending on the client and his/her needs, these sources can include any combination of print materials, videotapes, seminars on military career options, individual and group sessions, individual and group seminars, women's programs, and other resources available in the center. Regardless of the type of resource used, it is important to involve the client actively in the role of acquiring his/her career information. Examples of resources that are appropriate for this step are included in section IV.

At several points in the career exploration process, the client will need intervention by a counseling professional or para-professional, but the client may not ask for help. Staff should be aware of the client needs and status so they can intervene at the appropriate time and sustain client interest and motivation.

Career Decision Making, Goal Setting and Implementation

This step includes the development of an individual career plan and can only be successful if the client has progressed through careful analysis of self and thorough career exploration. This step is the culmination of those preparatory steps and the most intensive and time consuming for staff.

The staff should discuss the client's findings from the first two steps and assess the client's readiness to make tentative career decisions and set goals. For clients who do not exhibit readiness to go forward, staff must determine what is needed and have the student go back to some point in one of the previous steps.

For clients who are ready to proceed, the individual career plan should be developed. Identifying and committing to "next steps" should be a part of the individual's career plan. It is very important at this point to get the client to agree and commit to the next steps (or follow through) on their career plan. The center should have appropriate services and resources available to assist in the activities necessary follow through with the individual career plan.

The materials, resources, and services for clients should include those that are print, computer-based, and videotape to satisfy the various learning modes. A non-exhaustive list of topics to be considered is included here. Additional types of materials will be identified during the planning phase for the center:

Military career requirements

Skills transferability

Mini-courses on appropriate subjects

Life coping skills

Surviving change

Postsecondary training and education options

Seminars and guest speakers on appropriate subjects

Job search

Employability skills

Job applications

Resume development

Job interviewing

Job placement

Career ladders and career advancement

It is not critical that all these types or materials and services are available for all clients. The most important thing is that the resources are available and useful to the clients who need them, when they need them.

Promotion

Plans to promote the career counseling resource center and the availability of its resources and services should be explored and decisions made to insure maximum utilization by the groups the program is designed to serve. A detailed marketing plan for the center will be developed as another phase of the model for pre-military development. Therefore only a cursory list of promotion strategies is included here:

Newsletters

Public service announcements on radio and/or television

Articles in newspapers

Open house for program participants, their families, and others

A monthly calendar of center events and activities

Bulletin boards

Career posters

Coordination With Other Services

From time to time, it might be advantageous to coordinate the activities of the career counseling resource center with other related programs in Mississippi. Four programs are described briefly here, followed by a list of four other groups, that might be helpful in providing seminars, guest speakers, placement and ancillary services for the center:

1. Employment Security Commission: Job Service. In addition to paying unemployment insurance benefits and gathering labor market data, Employment Security through its network of local job service offices provides employment counseling and job placement. (For address, see 5 below.)

2. Job Training Partnership Act (JTPA). JTPA helps prepare people for productive employment. Through a partnership of business, government, education, and labor, programs are provided in which workers can learn new job skills, upgrade present ones, and receive assistance in obtaining employment. Many programs include assessment services to assist participants in developing career plans. This program is administered by the Mississippi Department of Economic and Community Development, Labor Assistance Division, 301 W. Pearl St, Jackson MS 39203-3089, (601) 949-2234.

3. Rehabilitation Services helps physically or mentally disabled citizens of Mississippi obtain employment. To be considered eligible for rehabilitation services a person must have a physical or mental handicapping condition, the condition must be a handicap in getting or keeping a job, and there must be a reasonable chance the person can be helped to get a job if appropriate services are provided. This program is administered by the Mississippi Department of Human Services, Office of Vocational Rehabilitation, 923 N. State St, PO Box 1698, Jackson MS 39215-1698 (601) 354-6825 or 1-800-443-1000.

4. Sex Bias Programs. The issue of equity is not limited to equality for women, even though women often suffer greater economic hardships as a result of sex role stereotyping. Among other things this program provides in-service activities to broaden horizons for people concerning career choices and provides activities to increase the awareness of females regarding the wide spectrum of career options available. Sex Bias Programs are administered by the Mississippi State Department of Education Office of Vocational, Technical, & Adult Education, PO Box 771 Jackson MS 39205, (601) 359-3088.

5. Labor Market Information
Mississippi Employment Security Commission
PO Box 1699
Jackson, MS 39215-1699
(601) 961-7452

6. Mississippi State Occupational Information Coordinating Committee (SOICC)
Sillers Building, Suite 1005
550 High St.
Jackson, MS 39201
(601) 359-3412

7. Office of Vocational, Technical, and Adult Education
Mississippi State Department of Education
PO Box 771
Jackson, MS 39205
(601) 359-3088

8. State Supervisor of Guidance
Mississippi Department of Education
Office of Vocational, Technical, and Adult Education
PO Box 771
Jackson, MS 39205
(601) 359-3951

Resources For The Career Counseling Resource Center

Historically, career information in libraries and career counseling offices was print, with an occasional filmstrip available. Today, a wide variety of sources are available to support career exploration and decision making, with the most popular being computer programs and videotapes. These materials have the advantage of providing information to today's young people and adults in a media with which they are comfortable and, in the case of videos, in a media through which they are accustomed to receiving information. In the near future, interactive video disc programs will be available.

Sources of Career Materials

Materials are available from a wide variety of sources, including state government agencies, federal government agencies, and commercial vendors. Some of these sources are:

1. Department of Defense
2. National Occupational Information Coordinating Committee (NOICC)
3. Mississippi State Occupational Information Coordinating Committee (SOICC)
4. Mississippi Department of Labor
5. Mississippi Department of Education
6. U.S. Government Printing Office
7. Publishers of career materials
8. Vendors of career software
9. Vendors of career audio-visual materials
10. Professional and trade associations
11. Labor unions

Materials from professional and trade associations and labor unions may be slanted and should be reviewed carefully.

In Mississippi, the State Occupational Information Coordinating Committee (SOICC) is an excellent starting point for obtaining information about both state and national career information sources. In addition, the SOICC has adopted the Careerware series of computerized career information software (Mississippi Choices, Choices CT, and Choices Jr systems) as a state-wide system and provides state-specific occupational information that is added to the national occupational information data base in the Mississippi Choices and Choices CT systems.

For other sources of career information, Brown and Brown (1990) suggest the following:

1. Career columnists often highlight new publications. One of the best known of these is Joyce Lain Kennedy, whose column appears in many syndicated newspapers.
2. Catalogues from publishers and distributors who specialize in career items.
3. Directories that describe career materials are of great help. One useful directory is Where to Start Career Planning: Essential Resource Guide for Career Planning and Job Hunting (1989), prepared by the staff of the Cornell University Career Center and sold by Peterson's Guides, PO Box 2123, Princeton NJ 08543.
4. Newsletters and periodicals concerned with careers review new materials. The Career Opportunities News reviews new books in every issue and includes a page citing free and inexpensive career

materials. It is distributed by Garrett Park Press, PO Box 190, Garrett Park MD 20896. The Journal of the National Career Development Association lists and evaluates new career materials that come to its attention. To contact AACD and NCDA, write 5999 Stevenson Avenue, Alexandria, VA 22304.

Types of Career Materials

As was stressed earlier, it is important that the collection of materials and resources in the career counseling resource center meet the needs of the target groups. The three most common types of materials are discussed here: print, computer-based, and video.

Print Materials

In general print career materials can include:

1. Books containing information about occupations
2. Occupational briefs
3. Occupational monographs
4. Occupational abstracts
5. Career magazines
6. Career tabloids
7. Posters/charts
8. Articles from newspapers and magazines

As has often been stated, career information resources for a career counseling center must be selected to meet the specific needs of clients. The center staff, using materials and resources selection criteria suggested earlier and using the sources listed above, should determine which are appropriate to their unique needs and program.

Even though there is no ideal list of print material titles for a career center, a suggested, but by no means all-inclusive, list of topics that might be considered by the staff as they investigate and evaluate the types of print materials in the above list is provided as follows:

Sample List Of Topics For Print Materials:

Career planning

Postsecondary education and training planning

Employer directories

Job search

Resume writing

Job interviewing

Employment applications

Employability skills

Life coping skills

Careers for special populations

Military careers

Careers in radio and television

Careers in health technologies

Careers in engineering technologies

Careers in the arts

Careers in business

Careers in education

Careers in environmental areas

Careers in government

Careers in science technologies

Social work careers

Careers in sports and recreation

Careers in mechanical fields

Careers in repair fields

Vocational/technical school and college catalogues

Some state and federal agencies publish books and journals related to career, occupational, and educational information. An overview of a few is included here. This is by no means intended to be an exhaustive inventory of useful government print career materials.

Military Career Guide is produced by the U.S. Department of Defense and contains descriptions of 205 military occupations, 134 enlisted occupations and 71 officer occupations. Each description includes the occupational title, work activities, physical demands, training provided in the military, qualifications, military service representation, helpful attributes, work environment, related civilian occupations, career opportunities, and an ASVAB qualification graph. It enables counselors and their clients to investigate military service as a career, because it provides extensive and valuable information about military careers. The military careers in the Guide are incorporated in the Mississippi Choices and Choices CT data bases. It is available at no cost from the Department of

Defense, U.S. Military Entrance Processing Command, 2500 Green Bay Road, North Chicago IL 60064, (800) 323-0513.

Mississippi Guide to Labor Market Information is a compendium of 21 sources of labor market information published and released by the Mississippi Employment Security Commission, such as Employment and Job Openings, Labor Market Trends, Mississippi's Business Population, and OES Survey Reports. It is available upon request from the Employment Security Commission, Labor Market Information, PO Box 1699, Jackson MS 39215-1699.

The following federal government publications can be obtained from Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402, (202) 783-3238:

Classification of Instructional Programs (CIP) includes descriptions of educational programs at the elementary, secondary, and post-secondary levels. It includes codes and definitions of instructional programs and focuses on the program purpose and program category dimensions. CIP codes are used in the Mississippi Choices and Choices CT systems to identify education and training programs.

Dictionary of Occupational Titles (DOT) defines and classifies more than 20,000 occupations that are performed for pay or profit in the United States economy. Each occupation has a title, a nine-digit code, and a definition. The definition contains the industry or industries in which the occupation is found, alternate titles, tasks performed, and related occupations.

Dictionary of Occupational Titles, 4th Edition Supplement contains codes, titles, and definitions for 761 occupations not defined in the 4th edition DOT. Many new technologies are represented by the occupations in the supplement. Stock No. 029-014-00238-1. The cost is $5.50 (subject to change.)

Guide for Occupational Exploration (GOE) provides career and occupational information on 12 broad occupational interest areas. It contains descriptions that include an overview of the interest area, narrative descriptions, and common questions counselors ask. GOE interest areas are included in Mississippi Choices and Choices CT.

Occupational Outlook Handbook (OOH) contains detailed career information about 200 occupations. It presents occupational descriptions, working conditions, education, training, and qualifications needed, job outlook, earnings, related occupations, and sources of additional information. The cost is $22.00 for paper cover or $24.00 for hard cover (subject to change.)

Occupational Outlook Quarterly is a journal published four times a year. It contains current articles about occupations, employment outlook, training opportunities, salary trends, and labor market trends. It reviews new counseling techniques and aids. The use of pictures and graphics is effective in conveying the ideas in the articles. The cost is $11.00 annual subscription or $3.00 single copy (subject to change.)

Standard Industrial Classification Manual (SIC) codes all types of business establishments in the U.S. economy according to type of product or service. It includes titles and descriptions of industries and contains numerical and alphabetical indices. SIC codes are included in specific information in the Mississippi Choices and Choices CT systems. The cost is $24.00 (subject to change.)

Standard Occupational Classification Manual (SOC) provides a common, easy to use coding structure for all occupations performed for pay or profit. It groups occupations into 22 broad occupational categories. The SOC has a four-digit classification system, the basis of which is similarity of work functions. SOC is the basis of the coding structure in Mississippi Choices and Choices CT.

Computer-Based Systems

Although not as numerous as for print materials, there are several vendors of computer-based career resources and, as with the print materials, there is wide variation in their comprehensiveness and quality. As with print materials, the staff should review systems and decide which are the best to support their objectives.

The types of computer-based materials that might be useful in the career counseling resource center include:

- Career information delivery systems
- Interest inventories
- Aptitude batteries
- Life skills
- Employability skills
- Employability development plans
- Resume writers
- Application letter writers
- Job search skills
- Interviewing skills
- College search
- Financial aids search
- Many other new types appearing constantly

Because the Careerware computer-based career systems have been adopted by Mississippi, it is recommended that they be used as the career information delivery systems in the center. Following is an overview of Mississippi Choices, Choices CT, and Choices Jr.:

> Mississippi Choices is a computer-based career information delivery system that focuses on a total career development process and teaches self and career exploration. Users first undertake an analysis of their career-related needs. Then they test their perceptions of their own needs against comprehensive national and Mississippi data bases to see which careers come closest to meeting their needs. The system contains detailed occupational and career information, new and emerging careers, military careers, sources of additional information, typical employers, college information, and many other relevant data elements. The system contains linkages to aptitude and interest inventories, such as ASVAB, GATB, and Holland Types from the Self Directed Search (SDS.) Users also have the opportunity to explore for colleges and education and training programs based on their own criteria. Lists of institutions and programs for specific institutions may be obtained. All information in Mississippi Choices is updated annually.

Choices CT (Choices for Career Transitions) is a computer-based career exploration and decision making system, coupled with a career counseling process, that is designed to help adults deal effectively with career transitions. It can be used by adults whose career changes are either voluntary and involuntary. The Choices CT process involves blending the results of self-analysis of the individual's current needs and status with a computerized analysis of transferable skills acquired in previous occupations. The resulting profile is then tested against an extensive data base of occupations to identify suitable future career and employment options. The system contains all the information and accessing features of Choices. The information in Choices CT is updated annually.

Choices Jr is a computer-based program designed to introduce upper elementary and middle/junior high school students and older students with low reading skills to career exploration. Self-knowledge is the cornerstone of the career exploration process. Choices Jr encourages students to take a close look at their needs and to consider them seriously. Then it graphically shows the impact of their self-analysis on the range of career options available to them. The system analyzes the world of work based on the student's input and suggests career areas to explore. Choices Jr is entirely tutorial, and students need no prior preparation or counseling.

Information about all three systems can be obtained from the Mississippi SOICC, Sillers Bldg. Suite 1005, 550 High St, Jackson MS 39201, (601) 359-3412. They are available through Careerware, attn Diane Stringer, 1607 Pear Orchard Place, Jackson MS 39211, (601) 957-8408.

Video Materials

The types of career videotape resources that can be useful in the career counseling resource center include:

Occupational descriptions

Occupational interest areas

Occupational assessment

Career areas

Job search

Resume writing

Job applications

Job interviewing

Job survival

Career transitions

The center staff, using appropriate selection criteria, should determine which videotape career resources are appropriate for the program. Although filmstrips are included in this category, it is not generally recommended that filmstrips be purchased because they are viewed as old-fashioned and dated.

As examples of the types of video resources available, two career videotape series that have been well-reviewed within the past year are described below.

Career Exploration and Planning Program Videos. Four video tapes on Career Exploration and Planning to support the career exploration and decision making process have been produced as part of the new Career Exploration and Planning Program (CEPP) by Appalachia Educational Laboratory. These videos can be used with groups or by individuals. They are:

"Your Future: Planning Through Career Exploration"
"Your Interests: Related to Work Activities"
"Your Temperaments: Related to Work Situations"
"Your Aptitudes: Related to Learning Job Skills"

Video Career Library is a series of 18 tapes, each representing a different occupational group, that depict 164 occupations. The videos present information about occupations and working conditions, while showing employees actually doing job tasks. Special care has been taken to discourage occupational stereotypes by maintaining gender and ethnic balances. Summary statements follow each video presentation. The Library is updated every three years. A preview tape is available upon request from Career Passports, 1319 Spruce St, Boulder CO 80302, (303) 449-1631.

Ms. Joyce F. Kinnison, from Cary, North Carolina, has ten years of teaching and counseling experience. Since 1984 she has been a consultant and researcher in the areas of career development, computer-based career information delivery systems, and labor market information.

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"I have been here for one and one half months and to me it's like home away from home. My advice is to give this program a chance. It's the best I have ever attended or seen."

-Quinton, Participant

PROGRAM EVALUATION

Susie D. Lamborn, Ph.D.
William H. Griffin, Ph.D.

Introduction

The Pre-Military Program is designed to enhance basic educational and life skills of clients to increase chances that they can pass a military entrance exam. Alternatively, the client's may gain employment or improve their educational level. The Pre-Military Program administration has requested guidance in developing a program evaluation strategy. This evaluation should provide information that can be used for ongoing program improvement. It is desirable that the plan be relatively straightforward in its implementation and not be excessively time consuming or costly.

The suggested evaluation plan focuses on three key components of the program--teaching, counseling, and administration. In addition, information from the program coordinator identifies two key issues which hamper the client success rate but that are not directly related to the training program. These factors are problems associated with inappropriate referrals to the program and conduct problems by clients that occur during the training period. Examination of each of these issues may be very helpful to the program and, therefore, are included in the evaluation plan. We also suggest that staff maintain detailed records on program failures and use that information to improve the program. Finally, we include comments on the impact-evaluation procedures currently used by the program.

Background Information

Client Services

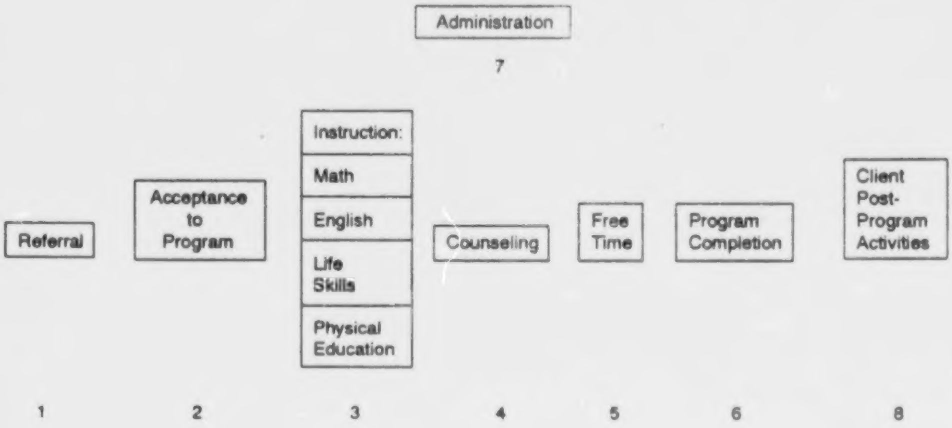
The Pre-Military Program is a training program geared towards improving basic educational and life skills that will enhance the clients' opportunities for becoming productive, working members of the community. The program emphasizes entry into the military as a means of employment and further training opportunities. However, alternative successful outcomes following completion of the program include obtaining employment or advancing educational levels through gaining a high school equivalency diploma or entrance to a university, college, or training school. The program focuses on training in three areas: basic mathematics, literacy, and life coping skills. Life coping skills include a diverse set of topics including nutrition awareness, study skills, and checkbook usage. In addition, the program provides physical fitness training and counseling services. Figure 1 shows a schematic diagram of the program components.

The program is designed as an intensive, short-term residential school. Participants live on site at a community college campus and live together with the other program participants for the duration of the program. The clients are housed in dormitories and meals are provided at a cafeteria on campus. Instruction, meals, and a room are all provided by the program without cost to the client. The actual number of days each client attends the program depends on their specific needs. Clients are expected to participate in the program a minimum of 30 days.

The focal point of the client services is group and individual instruction tailored to the client's abilities. Four classes are scheduled each week day: English, math, life skills, and physical education. An evening study hour is scheduled as well. Late evenings and weekends are free time.

Figure 1.

Components of the Pre-Military Program



1 through 8 = process evaluation
2, 6, 8 = outcome evaluation

Assessment of progress is based on changes in pre- and post-program TABE scores. This test, along with the client's ASVAB (a military entrance exam) score, is used to diagnose educational strengths and weaknesses. Although improvements on the TABE are used to evaluate the client's progress in the program, successful completion of the program relies on the client's post-program activities. To be considered a success the client must either gain entry to the military, obtain a job, receive a high school equivalency diploma, or enter a college, university, or technical school.

Staff

Instruction to clients is provided by several full and part-time instructors. A tutor provides remedial help and a full-time counselor provides services to clients as they are needed. The counselor also functions as the program coordinator and handles many of the administrative functions of the program. These functions include maintaining records of clients' performance, overseeing program spending, supervising other program staff, and maintaining relationships between the program and other agencies. Secretarial support is provided by a part-time clerk.

The program is connected with several other agencies, including Job Training Partnership Act (JTPA), The University of Mississippi, Mississippi Gulf Coast Community College, and all branches of the military. JTPA is the primary source of funding for the program. Dr. Jane Borne from the University of Mississippi is the principal investigator and project administrator for a planning grant provided by NOICC with funds originating in DOD. The Gulf Coast Community College's Vice-President and Dean of Instruction plays an active role in the administration of the residential program which Lin Harper directs. The Military recruiters are the primary referral agent for clients who enter the program.

Facilities

The planning grant operation has an administrative office located in a business mall in Gulfport, Mississippi. The JTPA funded program site is on the Perkinston Campus of the Mississippi Gulf Coast Community College (MGCCC). The MGCCC allocates several classrooms to the program and the counselor has an office nearby. The clients share dormitory space with enrolled community college students and eat meals in the campus cafeteria.

Target Population

The program is directed at individuals who want to enter the military but do not qualify on the ASVAB entrance exam. Clients must be JTPA eligible and have scored 21 or higher on the ASVAB. To be JTPA eligible, clients must be at least 17 years old, have no criminal record, have no past or present substance abuse problems, and not be pregnant. Clients must be referred by a military recruiter. Currently, clients must be residents of Mississippi.

Funding

The Job Training Partnership Act (JTPA) is the primary funding agency for residential program. A planning grant was provided by NOICC to the University of Mississippi.

Important Non-Service Activities

Several important program activities take place at the administrative level that do not directly involve client services. Some time is spent coordinating program activities, monitoring staff performance, and providing feedback to them. Also, records are maintained on client performance, program success rates, budgets, and expenditures. Evaluation reports are provided to the funding agency. Some time is spent maintaining relationships with associated agencies and seeking additional funding sources.

Special Characteristics

Four characteristics of the program are the limited time frame for the provision of services, the residential living arrangement, the focus on individual needs, and reliance on client activities following completion of the program for determining program success. Each of these characteristics define and to some degree limit the nature of the services that can be provided by the program. First, clients participate in the Pre-Military Program for a very limited time period, sometimes for as little as 30 days. Within this period, they are supposed to acquire substantive gains in knowledge, even though the average client can be described as an at-risk student. This time limitation requires an intensive learning environment in which both teacher and student are focused and on task. This objective is not an easy one to achieve.

The residential living arrangement offers special opportunities as well as difficult problems. Having the students on site allows the program to have more control over their activities and reduces the impact of adverse peer and family environments on the focused learning environment. The clients can get to know one another and use each other as a source of support in completing the program. At the same time, having them on site 24 hours a day means that the program staff sometimes have to deal with difficulties involving interpersonal problems among the clients and their poor management of unstructured time. With intensive contact with one another, opportunities arise for fighting as well as sexual activity between clients. When these interpersonal problems occur, they can interfere with the learning objectives of the program and increase dropout rates.

The program emphasizes the provision of services to clients according to individual needs. Clients are started and paced through the course work dependent on incoming abilities and individual strengths and weaknesses. The number of students in a single class is small. Individual attention and tutoring are provided to help students with special needs. Counseling is provided based on the individual needs of the client. Client-tailored instruction is probably one method that contributes to the program's successes, given some of the previous failures many of the clients carry over from earlier learning situations. It is also a desired method given many of the client's probable limitations in impulse control, motivation, and perseverance. Some individual attention is probably essential to assist these individuals in progressing within the limited duration of their stay in the program. At the same time, the focus on individualized instruction carries with it specific problems and concerns. For example, the progress of group instruction is difficult when clients may have extremely different abilities upon entering the program. Also, the number of clients who can participate in the program at one time is limited. This emphasis places heavy demands on the instructors, increases potential for burnout, and increases the need for highly qualified staff with previous experience working with at-risk students.

The success of the program is dependent on client activities that occur following the completion of the program. Because of this, it is important that the program is able to effectively track and maintain contact with clients who depart from the program. Upon locating previous clients, it is equally important that the program provide incentives for giving information about their current employment situation.

Specific Goals And Objectives

The primary goal of the program is to increase client participation as contributing members of the community. (See Table 1.) This contribution can be defined as entering the military, gaining employment, receiving a high school equivalency diploma, or entering a college or university. However, the program is geared specifically towards assisting clients to acquire skills that will aid them in gaining entrance to and becoming successful members of the military. Associated objectives are to improve basic math, literacy, and life skills. Clients are also expected to become more physically fit. These objectives are addressed by the provision of instruction in each area. In addition, personal counseling is available.

Evaluation Design

The suggested evaluation plan includes both a process and impact evaluation. The process evaluation examines whether the program is being implemented correctly. The impact evaluation examines whether the program is effective in achieving its goals. Additional general information about the evaluation process and the different forms of evaluation are summarized in Appendix A. The general steps for carrying out any evaluation are listed at the end of the summary. General information about conducting a survey is presented in Appendix B.

The process evaluation focuses on three key components of the program--teaching, counseling, and administration. In addition, evaluation suggestions will be provided for gathering information on problems associated with inappropriate referrals to the program and conduct problems by clients that occur during the training period. Each of these components addresses some aspect of process evaluation, which provides feedback on whether the program is running as intended. Steps for completing the evaluation are summarized in Table 2. A comprehensive schedule for the evaluation procedures is provided in Table 3. Various decisions that program organizers will need to make in settling on an evaluation plan appear throughout the text. These issues have been highlighted in a separate chart to make them more accessible (See Appendix C). Appendix J suggests additional reading.

Table 1.

Pre-Military Program Goal and Associated Objectives

Assist clients in becoming contributing members of the community (through a military career, gainful employment, or advancing their educational level).

ASSOCIATED OBJECTIVES:	PROGRAM ACTIVITIES
1. Increase basic math skills (Improve on TABE)	Math instruction Math tutoring
2. Increase basic literacy skills (improve on TABE)	English instruction English tutoring
3. Increase basic life skills	Life skills instruction Counseling
4. Increase physical fitness	Physical Education

Table 2.

Steps for Completing the Program Evaluation

1. a) Define a clear and consistent set of criteria for determining program success. Currently the program uses several definitions of success. We have focused on the goal of increasing clients' opportunities for contributing to the community through enrollment in the military, gainful employment, or an improvement in educational level. This appears to be the central goal of the program. (This decision defines the characteristics of the impact evaluation and influences plans for the process evaluation.) This goal needs to be defined in concrete terms. For example, what percentage of the clients need to be contributing to the community. How long following completion of the program do they have to become a contributing member of the community? How long do they have to remain a contributing member of the community?

b) Define a clear and consistent set of criteria for evaluating each component of the program, including instruction, counseling, and administration. Again, these criteria need to be defined in concrete as well as global terms. These criteria define the program evaluation plan. The criteria for evaluating the different aspects of the program should be clearly linked to the criteria of program success.

2. Decide if you are going to complete a process evaluation (establishing that the program is running as intended) or both a process and impact evaluation (the impact evaluation examines whether the program is successful in achieving its goal of helping clients to contribute to the community in several different ways). The current evaluation plan includes a very minimal impact evaluation plan. This plan would allow the program staff to determine what percentage of the clients are successful in contributing to the community. However, a more intensive evaluation of the program's success would include a comparison group of individuals who are comparable to your clients, but do not participate in the program. Based on earlier conversations with program administrators, we understood that you do not intend to complete this type of evaluation at this point

in time. Therefore, the impact evaluation plan focuses on the activities of your clients following completion of the program.

3. Once you have decided on the criteria for success, make sure you have the means of documenting these criteria. Because the program relies on knowing about the client's activities following completion of the program to evaluate the success of the program, you must have an effective system of tracking and obtaining information from clients in order to successfully evaluate the outcome of the program. If you decide that it is important for clients to have a period of a year following completion of the program in which to become contributing members of the community, you would need to make arrangements to track them for a year. If 6 months is a reasonable time period for them to become active in the community, then that should define the duration of the tracking period. You may have to conduct an evaluation with some constraints on the conclusions you make (e.g., "To the extent that we know x, then y is successful.").

4. Establish a schedule for when the different parts of the evaluation will occur.

5. Decide on a means of organizing, storing, and analyzing the data you will be collecting.

6. Compile the measures, materials, and equipment that will be used for evaluating the different aspects of the program. Meet with staff to inform them about the coming evaluation. Let your staff know what to expect. Make a plan for giving feedback from the evaluation.

7. Identify staff for completing the different parts of the program evaluation. It would be preferable to have one person in charge of the overall administration of the evaluation.

8. Pilot test the instruments you are planning to use.

9. Initiate the evaluation plan.

10. Summarize your results. Prepare a written document that describes the evaluation study an your results.

11. Provide feedback to program staff. Provide feedback so that the evaluation process can be improved.

Table 3.

Time Table for Implemention of Evaluation

Entry

Start evaluation folders for staff, clients, and program
Evaluation of client entry requirement and referral procedures
Pre-test of the TABE
Pre-test on physical fitness
(Pre- and post-test of life skills can be completed as part of each unit)
Establish procedures for evaluation of conduct problems - takes place as needed

Time 1 (second week)

Assessment of instructors by observer
Assessment of instructors by administrator
Assessment of counselors by observer
Assessment of administrators by observer
Feedback from instructors, counselors, and administrators

Time 2 (midpoint)

Assessment of instructors by observer

Time 3 (last two weeks)

Assessment of instructors by observer
Assessment of instructors by administrator
Assessment of counselors by observer
Assessment of administrators by observer
Feedback from instructors, counselors, and administrators

Completion

Assessment of counselors, instructors, and program by clients
Post-test of TABE
Post-test on physical fitness
Exit interview of client
Provide client with form to send back on entering military or receiving a position

3 Month Follow-up

Send another form to clients who have not responded

6 Month Follow-up

Telephone interview of clients who have not responded

The suggestions we have included for staff evaluation provide global, qualitative information about staff performance and effectiveness. You may also want to include more in-depth evaluation of program staff. Even if you are satisfied with their quality and abilities, you should be able to document this competency to outsiders. Evaluation should include information on the staff members' previous work performance (resume, certification, and letters of reference) and their performance in the Pre-Military Program.

In general, evaluations based on a single criterion are usually invalid. It is unfair to assess individuals on "bottom line" factors such as student improvement alone. Students also have to take some responsibility for improvement. A file or dossier approach that is comprehensive is more likely to present a true picture of the individual. We recommend maintaining an evaluation folder for each staff member and client. For staff, this folder would include basic information (e.g., general courses taught, teacher objectives, number of students per class) records of previous work performance, the evaluations recommended in this proposal, and any other more extensive evaluation measures you might want to include. Since the number of clients participating in the program at one time is limited, we recommend creating an individual folder for each client. The folder would include demographics, previous scholastic records, ASVAB results, recommendation or referral data, TABE and other test results, troubles while in the program, graduation date, counseling data, teacher comments, and follow-up data. Ideally, this information would be made into a database so that it is easy to pull up trends. Appendix D lists possible contents for files for staff, clients, and the program. Appendix E Provides information about a database program that could be used by the program staff.

An additional issue is whether the evaluation should be completed by observers who are internal or external to the program. Particularly in your small program which emphasizes group decision making and an informal organizational structure, it may be difficult for an insider to provide critical feedback to other staff members. It will be easier to convince outsiders of the conclusions of an evaluation if at least a portion of the review process is conducted by an external agent. Alternatively, it would be less expensive to have an internal reviewer. Also, staff might be more receptive to feedback from someone who knows them well and is familiar with the program.

Impact evaluation attempts to determine if the program has been effective in achieving its goals and associated objectives. The staff of the program already have a plan for impact evaluation of the program. We will make some observations on that plan and include suggestions for increasing response rates from clients once they have exited the program.

Process Evaluation

1. Teacher evaluation. Teacher evaluation would include four sources: a classroom observer, the clients, the program administrator, and the teachers. Teacher evaluation includes observations of classroom performance three times during the evaluation period by an observer, and evaluation by clients prior to leaving the program. This feedback provides information on the instructor's classroom performance. (Forms for the process evaluation are in Appendix F.) Forms 1A and 1C provide possible items for observer and client feedback on classroom instruction. In addition to qualitative evaluations of classroom performance, the observer calculates frequencies of on-task interactions for a 15 minute segment of class time. It also may be useful to determine the amount of time spent on task for specified time periods during class. For example, the observer would select a 10 minute period near the beginning and end of the class and calculate how much of that time is spent on task. The administrator provides information on the instructor's fit in the organizational structure of the program (See 1D). Finally, teachers provide feedback so they can identify areas that they perceive as particularly helpful and problematic (Form 1B). Administrator evaluation and teacher feedback would both occur towards the beginning and end of the evaluation period.

2. Counselor evaluation. Counselor evaluation includes observation of sessions with clients if possible. Alternatively, written reports of cases could be evaluated. As a means of having written records of client problems, we recommend that the counselor complete case studies. Sessions would be evaluated by an observer at the beginning and end of the instructional program (see Form 2A). In addition, the counselor will be evaluated by the clients who met with him or her in this capacity (Form 2C). Client evaluation will occur prior to leaving the program. Finally, the counselor will have an opportunity to provide feedback to identify useful and difficult aspects of working in the program, once near the beginning and once near the end of the training period (Form 2B).

3. Administrator evaluation. Administrator evaluation focuses on overall management of the program, communication with the instructors, and communication with agencies on which program functioning is

dependent. One aspect of the administrator's evaluation can include copies of documents completed and records complied in carrying out this role. This information would include data on clients, success rates for the program, budget data, and personnel interactions. The administrator will be evaluated by the instructors, and representatives of the key agencies related to the program (see Form 3A). As with other program members, the administrator will provide feedback to identify what is helpful and difficult about working in this capacity (3B). Administrator evaluation will occur once near the beginning and once near the close of the evaluation period.

4. Entry level evaluation. We recommend thorough documentation of each client's referral procedures and fulfillment of entry requirements. This information gathering should be completed as soon as possible, preferably before the training starts (see Form 4A).

Lin Harper, Director of the Pre-Military Program at MGCCC has information indicating that 100% of the clients with previous substance abuse problems have been unsuccessful in the program. These clients should not have been referred to the program. This section is designed to identify inappropriately referred clients as soon as possible and to track down the source of the mistake. When the mistake can be attributed to one of the agencies working with the program, it would be preferable to arrange for procedures to hold that agency accountable for any expenditures 'wasted' due to their mistake. Your program should not be suffering because a recruiter is not doing his or her job correctly. Secondly, does your program act quickly to exit these clients from the program once they are identified? Because your program is not set up to handle substance abuse problems, and knowing that these clients have a low probability of being successful in your program, allowing them to stay after their situation has been identified can only be a drain on your program. Perhaps the program staff could commit to a hard and fast rule that these clients have violated the terms of their agreement and should be immediately let go.

5. Conduct problems. Discipline and socialization are key concepts to teach the group who enter the Pre-Military Program, especially if they are planning to join the military. If they cannot adjust to your program structure, that in itself is a good indicator that they will have problems with the much more structured environment they will experience in the military, or even a work or school environment. In addition, conduct problems clearly interfere with the learning objectives that are central to the program. It is important to become aware of various factors associated with conduct problems. In particular, if conduct problems can be tied to the free time experienced by the clients on weekends or during evenings, this association may suggest that a more structured program may be desirable. You will want to be sensitive to problems that occur during structured time that actually relate to events that occurred outside of class (e.g., Do conduct problems occur frequently during Monday morning class? Is this behavior related to the Monday morning teacher, or is it related to events that occurred during the weekend?) Alternatively, you may find that discipline problems are associated with particular teachers. Perhaps some teachers are under or over disciplined in their classroom teaching style.

Conduct problems may also be encouraged by the integration of the program site with the broader college and local community. Although the clients may perceive contact with a broader community as more stimulating, it also provides access to alcohol and drugs, the potential of negative interactions with individual outside the program, and distraction from learning objectives. Relative isolation for a residential program like the Pre-Military Program would be desirable. Could military facilities be used for the program site (e.g., Camp Shelby)?

A second issue relates to the problems arising from having males and females participating in the program at the same time. Empirical evidence with other groups involving similar populations suggests that sexual interactions were exacerbated by an extreme imbalance in sex ratios. This seems to be especially true for residential programs. Experience has shown that these problems may diminish if a more balanced ratio between males and females is maintained.

Lin Harper mentioned that the program has had some success using a demerit system for misbehavior. Another possibility is to make use of a peer jury or panel for passing judgement on problem behavior. Other programs have been successful in marshalling peer pressure for maintaining program standards.

The following issues should be addressed: (see 5 a.)

> Are conduct problems associated with free time? Does this suggest that the programs needs to be more structured?
>
> Are conduct problems associated with the integration of the program with the broader community? Should the program be relocated to a more isolated location?

a. Are conduct problems associated with specific classes/teachers/counselors? Does this suggest that teachers or counselors are under or over disciplined? Perhaps discipline/authority is an additional criterion that should be used in staff selection. Perhaps teaching and counselor training for the program should include discipline as a topic.

b. Are conduct problems inappropriately deferred to the 'next higher authority'? Conduct problems that can be handled at a particular level [e.g., instructors] should not be passed along to the administrative level.

c. Does the pattern of problems suggest that the program is assuming more maturity on the client's part than is reasonable? If so, this can be addressed in several ways. Restructuring the program to decrease maturity demands or selecting clients with higher maturity skills are two possibilities.

d. Are there clear consequences tied to problem behaviors? If there are, have they been communicated to the clients?

6. Understanding program failures. The program can learn from clients who fail to complete the program successfully (Form 6A). Use them as a resource to understand ways to improve the program. Good case studies or exit interviews of failures, when collected, may indicate trends or sources of problems.

Comments On Current Impact Evaluation

The program evaluates the success of the program in two ways. First clients are evaluated on a pre-post testing of a standardized test (TABE) on entry to and following completion of the program. However, ultimately, the success of the program is dependent on whether clients make steps towards becoming active contributors to the community by either joining the military, gaining employment, or advancing their educational level, usually by obtaining a high school equivalency degree or entering a college, university, or technical school. We have several comments to make on the use of these outcomes for evaluating the effectiveness of the program.

1. Is the TABE the best measure of basic skills gains? Is the TABE the best possible test to meet program needs or is it just convenient and familiar? Several problems with the TABE include weak substantiation of basic statistical properties (e.g., validity and reliability), lack of statistical equivalency reported between forms, need for significant reading ability for completing practice exercises, and minimal guidance on score interpretation. On the other hand, the test provides good practice exercises

which can serve to improve test-taking skills. Tests for this population are difficult to find. Make sure that reasons for using the TABE or changing to another test are sound. An alternative achievement test that may be worth considering is the Adult Basic Learning Examination (ABLE). Although it has some problems, it is stronger than the TABE. See Appendix G for additional information on these exams.

2. Additional impact evaluation measures. The impact evaluation relies on a pre- and post-test of English and math performance. However, physical training and life skills are also central components of the program. Should a pre- and post-test of these areas be included as well? Physical fitness could be tested on entry and when finishing the program. The individual units of the life skills lessons could be designed to include a pre- and post-test. This procedure might be more desirable than deluging clients with an overwhelming number of exams on entering and exiting the program. In the area of life skill, you might want to include some testing on attitudes about the world of work. See Appendix G for information on the Work Values Inventory.

3. Tracking client activities following completion of the program. Given the program's reliance on the clients' post-program activities, procedures for tracking clients and for providing incentives for responses from them following completion of the program should be a central component of the program agenda and budget. First; the program needs to decide how long the follow-up period should continue. If clients are not in the military, employed, or in school 6 months after exiting the program, are they officially labeled unsuccessful? Or, would a one year follow-up period be more appropriate?

4. Improving the follow-up response rate of clients. Several suggestions for improving the response rate to surveys focus on following up initial contacts, designing the survey to be brief and easy to read, and providing incentives for responding. First, get all of the information that you can before clients leave the program. Some evaluation data can be collected at this point. Continue to provide the stamped pre-addressed form on departure, with instructions on when to return it. Follow up with a mailed survey for those who do not return the previously provided form. This survey should also be stamped and pre-addressed. Provide a brief easy to read cover letter. Use a second follow-up, this time by telephone. Ask the questions on the phone and record the responses. Train the telephone interviewers on good probing techniques. On all follow-ups, add questions to the survey which will assist in determining the reasons for failure to respond (e.g., lost forms, not interested). This may provide some insight into future responses.

Design the survey so that it is simple, short and easy to read. Aim at a low reading level. Anything that improves the survey's appearance may help to increase the response rate. Make it interesting. Type set it or print it on a laser printer. Use a good, interesting arrangement and format. Use lots of "white space". Finally, accompany it with a brief, well written cover letter. A revised design of the current follow-up survey appears in Appendix H. The original form appears in Appendix I.

Finally, provide incentives for returning the survey. A five or ten dollar cash incentive may help. The client receives a check when the survey is returned, properly filled out. The overall costs are usually less than the cost of the time devoted to beating the bushes for non-responders. A less desirable alternative is to contact a business for gift certificates (e.g., Pizza Hut, Dominos, soft drink companies, etc.). If you choose this option, select a business that is attractive to this age group.

Dr. Susie D. Lamborn and Dr. William H. Griffin are on the faculty of the University of West Florida, Pensacola, Florida, working in the Education Research and Development Center.

APPENDIX A

Definitions and Steps of the General Evaluation Process

Definition of evaluation:

> *Evaluation is the process of delineating, obtaining and providing useful information for judging decision alternatives.*

Prior to developing an evaluation plan, there are several considerations:

1. Decide what you really mean when you say you want an evaluation.
2. Identify what you (and others who will be recipients of evaluation data) will accept as credible evaluation.
3. Determine your general technical approach to the evaluation based on the information and credibility needs identified.
4. Decide what you need to gather information about.
5. Delineate what you can reasonably accomplish within the constraints of budget and political constraints.

There are several reasons for evaluating programs.

1. Process evaluation
   Process evaluation centers around developing and refining the process.

   a. Formative
      Formative or mid-course evaluations provide information on the program during its conduct. Such evaluation provides a base for decisions on corrective action or modifications which will keep the program on track towards its goal. It provides information for quality control (e.g., teaching quality, use of resources, program elements). This type of evaluation is usually diagnostic in nature; it is done soon enough to make corrective decisions.

   b. Summative
      Summative evaluation provides information on the course outcomes, after the fact. This is usually used for accountability purposes, as well as decisions on future program implementation--whether to continue, change, expand or reduce it. In some cases a summative evaluation is less appropriate. If the program is small or has been in existence such a short time that it is still in a state of flux, caution should be exercised in making any strong statements about results. Rather, the emphasis should be on possible corrections the next time.

2. Product evaluation
   Centers around the program product (student).

   a. Formative
      Provides information on the progress of the product through the program. Data should be timely enough to allow sufficient time for corrective action. This is diagnostic information.

b. Summative
Provides information on ultimate product outcomes. It should illuminate reasons for successes and failures; whether the program was appropriate for the individual.

Steps in evaluation:

1. Set the boundaries of the evaluation
   Define the program rationale.
   Define the criteria for determining program success (goals/objectives).
   Identify program constraints; budgetary, resource, political.

2. Select appropriate, realistic methods of evaluating
   Determine the reason(s) for evaluating; program, process, formative, summative.
   Focus on most significant aspects of the program--those that are consistent with the goals and criteria.
   Concentrate where likely to find most significant effects.
   Plan to collect a variety of information.
   Plan to collect data that will show that, at least, the program has done no harm.
   For formative evaluation, collect data periodically and in such a way that immediate corrective action can be realized.
   Pilot evaluation tools to make sure they provide data that is usable.
   Decide on means of organizing, sorting, storing data.
   Set a schedule.
   Identify resources needed.
   Involve staff in training, orientation.

3. Collect and analyze information.

4. Report findings
   Summarize results in a clear, concise, usable form.
   Provide feedback to staff and to system.

APPENDIX B

General Information about Conducting a Survey

CONDUCTING A SURVEY

W. H. Griffin

The planning of a survey involves both technical and organizational decisions. Several questions (e.g., what is the objective of the survey; who is the target population; what information is to be collected; how are the data to be processed and analyzed) must be answered during the planning stage. Time and effort adequately devoted in this planning stage will minimize difficulties later.

The development of an adequate survey instrument involves several stages. Considerations in each of these stages are briefly discussed in the following outline.

PLANNING

1. What are the objectives of the survey?

   State clearly and concisely why the survey is being undertaken, what kinds of results are expected, what types of questions will be asked, what will be done with the results.

2. What population is to be studied?

   Define the geographic, demographic and political boundaries of the sample. Will sampling be used? If so, how large a sample and how will it be selected? Do not use a convenience sample, but rely on a statistically defensible selection procedure.

3. What data are to be collected and how?

   Develop a survey blueprint. List objectives and number and types of questions which will be asked to assess each objective. Questions decided upon should be the best way of getting the information--it is not available from other sources.

4. What will (or can) be done with the results?

5. Are the results to be confidential?

   If confidentiality is necessary, how will it be treated? How will you identify non-respondents for follow-up or for correlating failure to respond with demographic or other data, and still maintain confidentiality?

6. What are the likely sources of error in the survey?

   Sampling error
   Error in sample selection
   Errors in addresses
   Lack of understanding by respondent
   Lack of knowledge by respondent

Concealment of the truth
Loaded questions
Processing errors
Conceptual errors (difference between what is desired and asked)
Anticipate the likely sources of error and attempt to take precautions to minimize them.

7. Is the survey to be mailed to the respondents' home or work address?

   The appropriateness of the receipt location depends on the occupation. Will the survey become lost in other paperwork? Will the respondent have time and opportunity to fill it out at work?

8. How is the survey data to be edited, coded and tabulated in preparation for the analysis?

9. What analyses are to be performed on the data?

10. What documents are to be prepared?

11. What field work will be necessary to obtain the survey data?

    Staffing and costs for preparing, conducting, tabulating and analyzing must be considered.

12. What decisions regarding timing, cost and staffing must be made?

13. How can pretests and a pilot survey be carried out to provide necessary formative information?

    The adequacy of the questionnaire, including the effectiveness of instructions, must be assessed. The variability of question response can also be determined to allow for question redesign. This can also provide data on which to base tabulation and analyzing resulting data. Also, the mechanism and organization for conducting the survey can be more effectively designed when the results of pilot testing are considered.

A CHECKLIST

- Can you clearly and explicitly state the specific goals?
- Do these goals describe a study that is worth doing?
- Do you know the characteristics of the population?
- How will you select the sample?
- Do have a clear plan for using the resulting data?

ITEM DEVELOPMENT

1. Develop clear questions that can only be interpreted in one way.

The information gained can be interpreted directly. The respondents' have the necessary information.

2. Each question must be clearly tied to the questionnaire blueprint.

3. Don't ask questions which will embarrass or irritate.

4. Questions should be clear and direct and not imply any ulterior motive.

5. Don't suggest an answer.

6. Be sure the question indicates whether it wants a factual answer or an opinion.

7. Avoid questions that ask for more than one bit of information.

8. Avoid vague adjectives or adverbs or words with vague or multiple meanings.

9. Avoid emotionally loaded words.

   Language should be fair to all and not contain any connotative meaning.

10. Avoid double negatives.

11. Avoid overuse of questions stated in the negative

12. Use abbreviations and jargon sparingly.

13. Questions should not be so broad that they can be answered with various levels of specificity.

14. Questions should be independent of those preceding or following it.

    Don't use questions to lead the respondent to answer in a particular way.

15. Avoid "if yes, then . . ."

16. Avoid hypothetical questions.

17. Avoid having the respondent rank things.

18. Provide a response category for each potential response that might be appropriate.

    If you are asking how many cylinders their car has, providing a choice of 6 or 8 would cause confusion among those who might have cars with 4 cylinders--they have no accurate response available.

    Include a "don't know" option, if that is appropriate.

    Response options should be mutually exclusive.

    Balance response scales--(A N D SD) would be poor, (SA A N D SD) is better.

19. Arranging responses vertically rather than horizontally minimizes errors caused by the indecision over marking before or after the desired option.

20. Pilot test questions.

Pilot testing will clarify the adequacy of items and instructions. A good technique is to start with more open-ended questions to determine the range of responses that they may elicit. Subsequent pilot tests can tend to more close-endedness as the variability of possible choices is determined.

A CHECKLIST

— Is each question tied to the blueprint?

— Does the question only ask for one bit of information?

— Does the question imply a desired answer?

— Are any words emotionally loaded, vaguely defined, or overly general?

— Do any of the words have a double meaning that may cause misunderstanding?

— Are abbreviations or jargon used that may be unfamiliar or confusing?

— Are the responses mutually exclusive and adequate to cover any logical answer?

INSTRUMENT DESIGN

1. Put the study title in bold type on the first page.

2. Make the format appealing to the eye.

   Use lots of "white space." Don't overcrowd the pages.

3. Instructions must be brief and clear.

   Put them in bold face or italics. Be very clear as to what you want in fill-in-the-blank questions.

4. Don't use the words "questionnaire" or "checklist."

   These have negative connotations for some people.

5. Provide a place to mark responses that is close to the question.

6. Begin with interesting, non-threatening questions.

7. Place questions in a logical order.

   The order should not only be logical but should be such that motivation and interest is enhanced.

8. Do not put important items at the end of the questionnaire.

9. Place open-ended questions at the end.

10. Group items into logically coherent sections.

11. Make the transition between sections logical and smooth.

12. Number the items in such a way as the respondent won't become confused.

13. Put an identifying mark on each page.

    Make it easy for pages to be reattached if they become separated.

14. Put the name and address where the form is to be returned, even it an addressed envelope is provided.

    It is easy for envelopes to become separated from the form.

TO IMPROVE RESPONSE

1. Type set, professional printing is best.

   A good use of professional, pleasing layout and white space is important. The respondent's first impression of the document is critical.

2. Identify who is sponsoring the survey.

3. Use a cover letter.

   Personalize the cover letter (i.e., Dear Jane). Print the cover letter on good stationary, making it appear as classy as possible. State what the survey is all about and what will be done with the answers.

4. Provide a stamped, self-addressed return envelope.

   Stamps are more effective than machine stamping or return postage guaranteed envelopes.

5. Boring content and questions are a bigger deterrent to good returns than is length.

6. Incentives help response.

   The use of coupons, cash incentives, etc. is helpful.

7. Send follow-ups to non-respondents.

Have a system to identify non-respondents and their reasons. Develop a professional follow-up letter. A telephone follow-up can be effective.

A CHECKLIST

— How is the quality of printing?

— Is an incentive being used?

— How will you know why people are not responding?

— Do you have a follow-up plan?

— Is your questionnaire one that you, yourself would fill out?

Berdie, D. R., Anderson, J. F., & Niebuhr, M. A. (1986). Questionnaires: Design and Use. 2nd ed. Metuchen, NJ: The Scarecrow Press.

Demaline, R. E., & Quinn, D. W. (1979). Hints for planning and conducting a survey and a bibliography of survey methods. Kalamazoo, MI: Evaluation Center, College of Education, Western Michigan University.

Ferber, R., Sheatsley, P., Turner, A., & Waksberg, J. (undated). What is a survey? Washington, DC: American Statistical Association.

APPENDIX C

Highlights of Decisions to be Considered by the Program Organizers

Highlights of Decisions to be Considered by the Program Organizers

DECISION 1. **Reorganization of the program to increase structure and discipline?** We were both struck by a set of three characteristics of the Pre-Military program that may very well be highly related. I am referring first to the demands placed on your program in terms of your main objective. The program's goal is to, within a very limited time frame, increase basic skill levels in a group that could be described as at-risk. By that I mean that they have had many past failures in learning situations, and they frequently come from home environments that are impoverished both economically and emotionally. Also, they are likely to be weak on motivation and stamina in a learning setting. Secondly, the program includes a high percentage of free time that is unstructured. This includes time each evening and all of the time on weekends. Third, the program staff occasionally have had to deal with conduct problems.

Would the program seriously consider possibilities for designing the program to be much more structured than it is now? We would recommend decreasing unstructured time during the week and including the weekend as part of the structured program. One possibility would be to emphasize academic learning during the week, with peripheral attention to physical training. Then weekends could emphasize physical training and possibly life skills with peripheral attention to studying for classwork.

Another possibility would be the implementation of a structured field trip program that incorporates learning assignments with the experience. For example, a trip to a museum might include assignments for writing an essay on some aspect of the trip and writing a letter to someone about a favorite part of the trip. Another trip might require students to make a budget for trip expenditures, keep track of spending along the way, and discuss budgeting and problems afterwards. A third trip might involve an extensive hike that would improve physical endurance and include exercises and practice of first aid procedures. Potential employers could come in for a job fair. A visit to a boot camp, including meetings with military staff, might be very informative for this group.

It appears that the program objectives may be twice injured by the current arrangement of structured and unstructured time. First, in trying to promote learning under such a limited time frame, it seems wasteful to not make use of every minute that the program staff have with the clients. Secondly, the conduct problems associated with the client's lack of experience with free time can only be detracting further from the educational goals of the program. These problems must be exhausting for the staff as well when they occur (I expect, especially for the counseling and administrative staff). Also, given the eventual goal of placing these individuals in the military, a structured program can only benefit them in preparation for the intensively structured format that they will experience with the military. Finally, given the program staff's sensitivity to nurturing and individuality, I have very little concern of structure and discipline taking over the personality of the program. I am confident from the little time that I spent with Lin Harper, that she would maintain a nurturing and caring environment within the context of a highly structured and disciplined format. I really think you can have both and would encourage you to consider ways that you might increase the discipline and structure components of the program. Having these elements in place and clearly articulated, with strict consequences for misbehavior, may help the staff work in a preventive rather than a crisis intervention mode.

DECISION 2. **Use of external versus internal review?** In the implementation of the evaluation plan, a decision needs to be made on whether the observer should be external or internal to the program. Each choice has strengths and weakness. Choosing an internal reviewer may be more cost effective. Staff may be more receptive to feedback from an insider than from someone outside of the program. However, you may be adding additional duties to an already over-committed staff member. More important, it may be difficult for an inside person to honestly provide critical feedback. This may be especially true for a small program such as yours that emphasizes team effort and group decision making. It can be difficult to be a colleague and friend one minute and a critic the next. Related to this problem, using the evaluation to document your program to outsiders may be less effective when the evaluator is an insider. The potential is there for someone to say or believe that of course the evaluation looks good when someone from inside the program was in charge. External review need not be constant but could be periodic-- annual or semi-annual-- and could serve to augment and focus on-going internal evaluation.

DECISION 3. **Enforcement of accountability of associated agencies, particularly the referral agent?** You may want to institute a procedure for holding agencies that you work with accountable for problems and mistakes that originate from their work. Your program would benefit greatly, for example, from not having to deal with clients who enter the program but should never have made it past the recruiter. You will know best whether instituting this type of policy will cause more problems than it is worth. Maintaining a data base of referrals would provide results that could help determine if improper referrals are an anomaly or a trend.

DECISION 4. **Depth of review that will best serve for evaluation of instruction?** Based on your instructions to us that the evaluation plan be easily manageable, we have focused on broad general characteristics for evaluating the overall adeptness of staff in the classroom environment. We have asked for broad qualitative assessments by classroom observers. However, this bypasses a true evaluation of the instructors' knowledge of their content and skill at teaching at-risk students like your clients. Even if you are confident of the ability of your staff, you should be able to document their qualifications to outsiders. This documentation should include both their previous record (resume and letters of recommendation) as well as through their performance record while working in your program. If you don't already have this, you may want to keep records on your staff that include previous records, the evaluation forms from our evaluation plan, and any other more in-depth evaluation you may want to implement from time to time.

DECISION 5. **Achieve a more balanced male/female ratio?** You mentioned the number of problems associated with male-female relationships, not the least of which includes sexual activity between clients while they are participating in the program. Our experience indicates that problems between males and females seem to escalate when an extreme ratio occurs. When the ratio becomes excessively imbalanced the lesser represented sex receives excessive attention from members of the other gender. Simply stated, a desired ratio is one similar to what people experience in everyday settings. Certainly, your program includes far fewer females than males. You may want to either attempt a better balance or run the program for each sex independently and at different times. These options may be more feasible when you have more clients to choose from.

DECISION 6. **Include pre-training for staff in discipline and structure with at-risk students?** In describing the qualities you looked for in selecting staff, you mentioned teaching ability, especially with nontraditional methods, nurturing qualities, and desire to help students. However, you did not mention experience with discipline problems with students with low maturity levels. You may want to preselect for this experience as well as provide additional training in the hopes of preventing and diminishing the likelihood of future conduct problems with clients.

DECISION 7. **Acquire funding for tracking clients and providing incentive for their response once they are found?** Determining the success of the program is highly dependent on knowing the client's activities after they have completed the program. Did they or did they not enter the military or a university or gain employment? It appears that currently you have very little money available to obtain this information. You should have funds for tracking your clients by mail, by phone, even by personal interview. Once you have found them, that doesn't mean they will be motivated to provide the information you need. You should also have funds to provide a monetary incentive for receiving feedback from them (e.g., upon receiving a completed survey or finishing a telephone interview, they are given ten dollars). We suggest a three step procedure: First, give a survey to them when they leave the program. Send them a second survey as a follow-up. Then, telephone as a third follow-up.

APPENDIX D

Possible Contents of Evaluation Folders for Staff, Clients and the Program

Possible Contents of Evaluation Folders for Staff, Clients, and the Program

Instructor

- Curriculum Vitae or resume
- Certification credentials
- Employment contract
- Job description
- Employment record
    - Pre-service training
    - In-service training
- Course objectives (terminal and enabling objectives)
- Teaching load
- Annual personal objectives and degree to which they were met
- Summary of counseling referrals (number, type, reason)
- Evaluations
    - Student evaluations
    - Annual administrator evaluations
    - Annual counselor evaluations
    - Observations by external evaluator
    - Classroom interaction evaluation (observations
- Provision for inclusion of anything the instructor feels would be relevant

Counselor

- Curriculum Vitae or resume
- Certification credentials
- Employment contract
- Job description
- Employment record
    - Pre-service training
    - In-service training
- Summary of counseling record
    - Summary of referrals, type, actions, resolutions
- Evaluations
    - Student evaluations
    - Annual administrator evaluations
    - Annual teacher evaluations
    - Observations by external evaluator
- Provision for inclusion of anything the counselor feels would be relevant

Administrator

- Curriculum Vitae or resume
- Certification credentials
- Employment contract
- Job description
- Employment record
    - Pre-service training
    - In-service training
- Evaluation
    - Summary of program evaluation by students
    - Summary of student enrollment, successes, failures
    - Annual teacher evaluations
    - Annual counselor evaluations
    - Summary by external evaluator
- Provision for inclusion of anything the administrator feels would be relevant

Student

- Demographic data
- Referral record
    - Who referred
- Checklist of entrance requirements met
    - Explanation of any waiver with reasons
- Prior scholastic record
- ASVAB results
- Academic records
    - TABE entrance scores
    - Academic record when enrolled
    - TABE final scores
- Behavioral record
- Evaluation
    - Evaluation by teacher
    - Evaluation by counselor
- Exit record
    - Exiting prior to completion of program, reasons
    - If completion, destination
        - Military
        - Work
        - School
        - Other
- Last known address, phone
- Follow-up survey response

- Program
  - Summary of entrance data
    - Entrance refused, why, who referred
  - TABE score summary, entrance, final
  - Summary of objectives met
    - Learning
    - Behavioral
    - Other
  - Summary of where students went
  - Summary of early terminations (voluntary, involuntary)
  - Summary of final results by referral source
  - Summary of follow-up survey responses
  - Summary of external evaluation responses

APPENDIX E

Recommended Data Management Program

Paradox Version 3.5

Price: $485
Company: Fast Micro
Address: 3655 E. La Salle St.
Phoenix, AZ 85040
Phone: 1-800-441-3278

Data management programs fall roughly into three types:
Flat-file
Relational
Text based

A flat-file system is similar to a file cabinet folder storing copies of a form. Each completed copy of the form is a "record" and each entry on a form (or record) is a field. For example, if forms are filled out on ten persons and each form has an entry for the social security number of the person, there are 10 records in the file and each record has a field for the social security number.

Flat-file system is simple to design and maintain. Reports can be generated to list any number or combination of fields and can provide some calculations (e.g., sums, averages, total number) on all records for numeric fields in the file. Records can be easily sorted (e.g., create a list of all records with a common zip code, list all 20 year old males).

Flat-file systems tend to be less difficult to learn and maintain. They are also usually less expensive.

A relational data base can function just as a flat-file system. However, it goes a step further in its capabilities. It may be inconvenient (or overly complex) to provide all entries (fields) on one form. This may make the form overly long and complex. It might be advisable to have several forms on each person (record). Each of these forms will have a common field (e.g., name, social security number) to tie them together. A relational data base can select fields from each of the files on that person. For instance, there might be a file on entrance data, keyed to the social security number. Another file might be of exit data, also keyed to social security number. A report can then be generated to match entrance and exit data for each social security number and generate information on changes in pre and post-test scores, sorting records from the most to the least score change.

In both of these data base programs, fields must be specified as numeric (all numbers) or alpha-numeric (containing letters or numbers). The field size of alpha-numeric fields must be decided. This necessitates some prior planning to determine the potential size of all fields. Coding is helpful in many cases (i.e., using numeric codes for schools rather than school names reduces field sizes.) Where it is impossible to foresee the size of alpha-numeric fields or where a lot of material must be entered in a given field, a text-based data base may be preferable. It must be cautioned, however, that large text fields are difficult to sort, categorize or sum.

Paradox is a relational data base that functions quite easily and in a straight-forward manner as a flat-filed data base. In this function, it is relatively easy to learn and manipulate. However, it has a vast array of relational capabilities and is quite capable of supporting on-screen data entry forms, field checks, look ups of codes, etc. Like all relational data bases, as one taps the potential of the program,, it becomes increasingly more complex. Paradox is consistently rated as one of the top data bases in the field. It's cost is comparable to others of similar ability. Its difficulty and ease of learning is probably at the easier end of similar programs. If there is any possibility of moving into the more ambitious aspects of managing data, I would strongly recommend a relational data base and my experience with Paradox makes me comfortable with this program. It can be installed on most IBM or IBM compatible machines with a hard disk and at least 640K or RAM memory.

The price of $485 that is quoted for Paradox may not be the lowest available, but it is close. Out past purchases of Paradox have been upgrades and it has been some time since we directly purchased a totally new program. Upgrades are typically much less expensive than initial purchases. Mail order purchases are quite safe for computer software, as long as the firm you deal with has some permanence and a reputation for reliability.

I would suggest that some assistance may be needed in initially becoming familiar with a data base. Vendors are not a good source for this help.

APPENDIX F

Forms for Process Evaluation

1A. Instructor Evaluation by a Classroom Observer.

Please rate the instructor on the following criteria. Circle one number for each item.

Instructor________________ Date_________________Evaluator_____________

1. Classroom authority

1 2 3 4 5
/----------/----------/----------/----------/
Weak Strong

2. Receptive to students.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

3. Knowledgeable in subject matter

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

4. Demanding/ has high expectations of the students.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

5. Teaching style works well with at-risk students.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

In this teacher's classroom, students are:

1. Attentive

1 2 3 4 5
/-----------/-----------/-----------/-----------/
Not at All Very Much

2. Actively involved

1 2 3 4 5
/-----------/-----------/-----------/-----------/
Not at All Very Much

3. Students improve on this instructor's subject when taking the post-test.

1 2 3 4 5
/-----------/-----------/-----------/-----------/
None A few Some Most All

For a 15 minute interval during the classroom, count the frequency of three types of on task interactions.

Frequency of on task interactions:

______Teacher to student

______Student to teacher

______Student to student

Comments____
____
____
____
____

1B. Feedback From Instructor

Rate each factor for the level of problems it causes you.
Circle only one number for each item.

Do any of the following student aspects present problems when you are teaching?:

1. Student attitude.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious This is Not
Problem A Problem

2. Conduct problems with students.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious This is Not
Problem A Problem

3. Low student ability.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious This is Not
Problem A Problem

4. Poor social skill of students.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious This is Not
Problem A Problem

5. Other ____

6. Comment or provide details on problems with any of the above ________________
____
____
____
____

Do any of the following aspects of the work situation cause problems in the completion of your work?

1. Group instruction.

1 2 3 4 5
/----------/----------/----------/----------/
A Serious Problem — This is Not A Problem

2. Individual instruction.

1 2 3 4 5
/----------/----------/----------/----------/
A Serious Problem — This is Not A Problem

3. Classroom size.

1 2 3 4 5
/----------/----------/----------/----------/
A Serious Problem — This is Not A Problem

4. Overwork/exhaustion.

1 2 3 4 5
/----------/----------/----------/----------/
A Serious Problem — This is Not A Problem

5. Support from program administrator.

1 2 3 4 5
/----------/----------/----------/----------/
A Serious Problem — This is Not A Problem

6. Relations with other staff members.

```
1          2          3          4          5
/----------/----------/----------/----------/
A Serious                                   This is Not
Problem                                     A Problem
```

7. Other____

8. Comment or provide details on problems with any of the above____________________
____
____
____
____

Instructors, we would appreciate your response to the following questions:

1. What aspects of the program are most rewarding to you? Why?
____
____
____
____
____

2. What aspects of the program are most frustrating for you? Why?
____
____
____
____
____

3. If you could change on thing about the program, what would you do? Why?
____
____
____
____
____

1C. Student Evaluation of Instruction

Subject__________[math, English, life skills, physical fitness]

Please answer each item by circling the number that best matches how you feel. Circle only one number for each item.

In this class I:

1. Learned a lot.

1 2 3 4 5
/------------/------------/------------/------------/
Not at Very
All Much

2. Tried hard.

1 2 3 4 5
/------------/------------/------------/------------/
Not at Very
All Much

3. Was bored.

1 2 3 4 5
/------------/------------/------------/------------/
Not at Very
All Much

4. Was confused.

1 2 3 4 5
/------------/------------/------------/------------/
Not at Very
All Much

5. This class helped me to improve my _____ skills.

1 2 3 4 5
/------------/------------/------------/------------/
Not at Very
All Much

How would you describe the _______ instructor.

This instructor:

1. Keeps the students under control during class.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

2. Is receptive to students.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

3. Knows the subject matter.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

4. Has high expectations of the students.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

Comments on any of the above____
____
____
____

Please answer the following questions.

1. Who was the best teacher in the program?________________________
Why was he or she the best?____
____
____

2. What was the best subject?________________________
Why was it the best?____
____
____

3. What was the most useful subject?__________________
Why was it the most useful?____
____
____

4. What did you like most about the Pre-Military Program? Why? Try to be as specific as possible.
____
____
____
____

5. What did you like least about the Pre-Military Program? Why?
____
____
____
____

6. If there was one thing you could change about the program, what would you do? Why?
____
____
____
____

1D. Instructor Evaluation by Administrator

Please rate the instructor on the following criteria. Circle one number for each item.

Instructor_______________ Date_________________Evaluator_____________

1. Has a good attitude.

1	2	3	4	5
Not at All				Very Much

2. Works hard.

1	2	3	4	5
Not at All				Very Much

3. Is organized and efficient.

1	2	3	4	5
Not at All				Very Much

4. Is flexible.

1	2	3	4	5
Not at All				Very Much

5. Works well independently.

1	2	3	4	5
Not at All				Very Much

6. Works well with peers.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

7. Works well with superiors.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

8. Responsive to feedback.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

9. Communicates needs and problems to administration.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

Comments____

2A. Evaluation of Counselor

Please rate the counselor on the following criteria.
Circle one number for each item.

Counselor__________________Date___________Evaluator____________________

1. Authority with client.

1 2 3 4 5
/----------/----------/----------/----------/
Weak Strong

2. Receptive to client.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

3. Emotionally supportive.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

4. Provides useful solutions.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

5. Allows the client opportunities to talk.

1 2 3 4 5
/----------/----------/----------/----------/
Not at Very
All Much

During the counseling session, the client is:

1. Comfortable with the counselor.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

2. Actively participates.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

3. Appears to have benefitted from the session.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All
Very Much

Comments____
____
____
____

2B. Feedback from Counselor

Rate each factor for the level of problems it causes you.
Circle only one number for each item.

Do any of the following client aspects present problems when you are counseling?:

1. Client attitude.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

2. Conduct problems with clients.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

3. Low classroom ability.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

4. Poor social skill of clients.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

5. Severe emotional problems of clients.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

6. Other ____

7. Comment or provide details on problems with any of the above________________

Do any of the following aspects of the work situation cause problems in the completion of your work?

1. Overwork/exhaustion.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

2. Support from program administrator.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

3. Relations with other staff members.

1 2 3 4 5
/------------/------------/------------/------------/
A Serious Problem — This is Not A Problem

4. Other________________________________

5. Comment or provide details on problems with any of the above________________

Counselor, we would appreciate your response to the following questions:

1. What aspects of the program are most rewarding to you? Why?

2. What aspects of the program are most frustrating for you? Why?

3. If you could change one thing about the program, what would you do? Why?

2C. Student Evaluation of Counselor

What did you meet with the counselor about? Check all that apply.

____Career counseling

____Drug or alcohol problem

____Problems adjusting to the program

____Family situation

____Other:________________________

____I did not meet with the counselor

How would you describe the counselor? Please circle one number for each item.

The counselor:

1. Is easy to talk to.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All Very Much

2. Listens to what I have to say.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All Very Much

3. Is available when I need to talk.

1 2 3 4 5
/------------/------------/------------/------------/
Not at All Very Much

4. Has helped with my career counseling.

1 2 3 4 5
/----------/----------/----------/----------/
Not at All
Very Much

5. Was helpful with my personal problems.

1 2 3 4 5
/----------/----------/----------/----------/
Not at All
Very Much

6. I requested the meetings with my counselor.

1 2 3 4 5
/----------/----------/----------/----------/
Never
Always

7. My meetings with the counselor were a regular part of the program

1 2 3 4 5
/----------/----------/----------/----------/
Never
Always

8. My meetings with the counselor were requested by someone else.

1 2 3 4 5
/----------/----------/----------/----------/
Never
Always

Comments____

3A. Evaluation of Administrator

Please rate the administrator on the following criteria.
Circle one number for each item.

Administrator____________________Date____________Evaluator____________________

The administrator:

1. Has a good working relationship with instructors.

1 2 3 4 5
/------------/------------/------------/------------/
Never Always

2. Provides feedback to staff on a regular basis

1 2 3 4 5
/------------/------------/------------/------------/
Never Always

3. Is knowledgeable about staff abilities and weakness

1 2 3 4 5
/------------/------------/------------/------------/
Not at Very
All Much

4. Is supportive of program staff.

1 2 3 4 5
/------------/------------/------------/------------/
Never Always

5. Clearly delineates program goals to the staff.

1 2 3 4 5
/------------/------------/------------/------------/
Never Always

6. Prevents client discipline problems when possible.

1 2 3 4 5
/------------/------------/------------/------------/
Never Always

7. Addresses client disciple problems adequately when they arise.

1 2 3 4 5
/-----------/-----------/-----------/-----------/
Never Always

8. Is well organized and efficient

1 2 3 4 5
/-----------/-----------/-----------/-----------/
Not at Very
All Much

9. Provides strong leadership.

1 2 3 4 5
/-----------/-----------/-----------/-----------/
Not at Very
All Much

10. Maintains good relations with other agencies [university administration, referral agency, funding source]

1 2 3 4 5
/-----------/-----------/-----------/-----------/
Not at Very
All Much

Comments____
____
____
____

3B. Feedback from Administrator

Rate each factor for the level of problems it causes you.
Circle only one number for each item.

Do any of the following staff aspects present problems when you are doing your work?:

1. Staff attitude.

1 2 3 4 5
/----------/----------/----------/----------/

A Serious Problem	This is Not A Problem

2. Staff are not properly trained for the work.

1 2 3 4 5
/----------/----------/----------/----------/

A Serious Problem	This is Not A Problem

3. Staff are not handling conduct problems adequately.

1 2 3 4 5
/----------/----------/----------/----------/

A Serious Problem	This is Not A Problem

4. Poor working relationships among the staff.

1 2 3 4 5
/----------/----------/----------/----------/

A Serious Problem	This is Not A Problem

5. Other____

6. Comment or provide details on problems with any of the above______________
____
____
____
____

Do any of the following aspects of the work situation cause problems in the completion of your work?

1. Poor communication with program staff.

1 2 3 4 5
/------------/------------/------------/-----------/
A Serious This is Not
Problem A Problem

2. Poor communication with other agencies.

1 2 3 4 5
/------------/------------/------------/-----------/
A Serious This is Not
Problem A Problem

3. Insufficient staff to run the program properly.

1 2 3 4 5
/------------/------------/------------/-----------/
A Serious This is Not
Problem A Problem

4. Overwork/exhaustion.

1 2 3 4 5
/------------/------------/------------/-----------/
A Serious This is Not
Problem A Problem

5. Support from other program staff.

1 2 3 4 5
/------------/------------/------------/-----------/
A Serious This is Not
Problem A Problem

6. Relationships with other staff members.

```
        1          2          3          4         5
        /----------/----------/----------/---------/
A Serious                                     This is Not
Problem                                       A Problem
```

7. Other____

8. Comment or provide details on problems with any of the above________________

Administrator, we would appreciate your response to the following questions:

1. What aspects of the program are most rewarding to you? Why?

2. What aspects of the program are most frustrating for you? Why?

3. If you could change one thing about the program, what would you do? Why?

4A. Information sheet for incoming client: Referral problems

1.______________ Who is the referral agent?

2.______________ Does the client fulfill all entry requirements

_________ Was the client under 17 years old?

_________ Did the client score below 21 on the ASVAB?

_________ Does the client have a criminal record?

_________ Does the client have past or present substance abuse problems

_________ Is the client pregnant?

If the answer to any of the above sub-questions is yes, why was the client admitted to the program?

_________ The referral agent did not ask for this information.

_________ The referral agent knew but sent the client anyway.

_________ The client lied to the referral agent.

3.____________ Note the date the program became aware of client's ineligibility.

______________ Note the date the client was discontinued from the program.

______________ Note the date the client officially left the program grounds.

4.____________ Who was responsible for assigning this client to the program?

5.____________ Was this person/agency held accountable for the mistake?

______________ Was the person/agency notified of the problem?

__________ Who was responsible for any money/arrangements required for exiting the client from the program?

__________ Was the program reimbursed for money spent on this client?

__________ Was the client omitted from the success rate figures?

5A. Information sheet on conduct problems

Involving which client (s):__________________________.

1. Identify the conduct problem

______Drug or alcohol problems

______Arguing between clients

______Physical fighting between clients

______Sexual activity between clients

______Pregnancy occurred during program participation

______Disagreement with teacher

______Other____
____
____
____

2. The problem was:

______Personal (only involved one client)

______Between two or more clients (did not involve program staff in initial problem)

______Included individuals not related to the program (university or local community members)
______Between client(s) and staff

3. When did the problem occur:
______Date____________Day of the week_________Time

4. The problem occurred during:

______Day structured time

- ______Breakfast

- ______Morning class

- ______Afternoon class

- ______Physical training

______Day unstructured time

  ______Morning break

  ______Afternoon break

  ______Lunch

______Evening structured time

  ______Study hour (7-8 pm)

______Evening unstructured time

  ______Supper

  ______Evening free time (8-11 pm)

  ______After lights out (11 pm)

______The weekend

5. Even if the problem occurred during structured time, can it be tied to events taking place during free time?

______No

______Yes

  ______Morning break

  ______Afternoon break

  ______Study hour

  ______Evening Free Time

  ______Weekend

6. If yes, describe the earlier events____

____

____

____

7. Who was primarily responsible for resolving the problem?

_______An instructor

_______The counselor

_______The counselor with assistance from the university administration

8. Should the problem have been resolved at a lower level in the hierarchy (e.g., by the instructor instead of being brought to the counselor/administrator)

9. How was the problem addressed?

10. Within 2 days was the problem adequately resolved? If no, why not?

11. What were the consequences for the client?

_______Removal from the program

_______Warning, next incident will result in removal

_______Penalty [free time used for studying, etc?]

_______None

6A. Failure Information

1. What type of failure:

A.______Did not complete the program.

______Substance abuse problems

______Became pregnant

______Conduct problems unrelated to substance use.

B.______Did not improve on the post-test.

______Math

______English

______Life Skills

______Phys Ed

Reason for not improving:

______Lack of effort

______Discipline problems

______Difficulties with the teacher

______Other (Specify)

C.______Did not gain entry to the military, gain employment or obtain a high school equivalency degree.

______Failed the entrance exam

______Did not apply

APPENDIX G

TABE

TESTS OF ADULT BASIC EDUCATION (TABE)

The TABE is essentially identical to the 1957 edition of the California Achievement Tests (CAT). Originally designed for an elementary school population of children, the TABE is repackaged as an instrument for adult learning situations. Only minor changes have been made to make its language more appropriate for adults. The constructs the TABE inherited from the CAT, combined with changes in format, some rephrasing of items and the inclusion of preliminary exercises, makes inferences based on the applicability of the, already weak CAT substantiation, a questionable practice. Alternative test forms are paraphrased rather than equivalent forms. No statistical equivalency data is provided for different forms.

Practice exercises used to assist in the assignment of examinees to test level forms is good. These provide examinees with exposure to test taking skills so could reduce random error effects where these skills are weak. Unfortunately, these preliminary exercises require significant reading skills on the part of the examinee.

The reading test consists of three levels. The first level is somewhat abstract and its appeal to adults would probably be minimal. The final of three arithmetic sections (computation) appears to be good. The language test section on language mechanics is also useful.

The test provides minimal guidance on score interpretation. No research is provided for the table used to convert raw scores to recommended levels. Only grade-equivalent scores are provided. These are based on the 1957 CAT. Grade-level norms are included primarily because that is what was inherited from the CAT and not for any pedagogical rationale. Grade-level elementary materials lack appropriateness to adult learning situations.

There is no discussion of reliability or validity. The "Analysis of Learning Difficulties" provided encourages the interpretation of raw scores on small numbers of items, a procedure that would provide results with questionable reliability. The absence of any discussion of reliability is particularly unfortunate as standardized tests used with disadvantaged populations usually exhibit especially low reliability levels. Basing test normative data on other tests, especially those designed for a dramatically different population is indefensible.

TABE publishes three test levels. These are collections of CAT levels without substantiating information on the appropriateness or validity of the levels selected. The content validity of all levels, especially E, is questionable.

For all of its inadequacies, TABE may be useful for those faced with populations of adult semi-literates. The content does not appear to be essentially different than other adult literacy tests which also were originally developed for elementary school populations. Certainly, there are few test choices for such a group. It is recommended that interpretation of data for adult groups be based on local experience levels as no definitive guidance, that is creditable, is provided by the test itself. Test results should be used clinically and not statistically. They may help pinpoint problem areas to be addressed in instructional strategies. Pre-post measurement can be used for groups but their use with individuals lacks any supporting reliability, let alone validity.

An alternative achievement test, that may be worth considering, is the Adult Basic Learning Examination (ABLE). The ABLE is published by Harcourt Brace Jovanovich, Inc. Some of the problems of the TABE (e.g., weak documentation, reliance on grade-equivalent scores) are present with the ABLE, as well. However, the authors have attempted to improve on the statistical analysis and are focusing on the relevant target population.

Three levels are provided, 1-4, 5-8, and 9-12. There is some indication, however, that level I would be most appropriate for grades 1-2 and level II would be most appropriate for grades 3-5.

The purpose of the test is to determine the general educational level of adults who have not completed formal eighth grade education and to evaluate programs designed to raise their educational level. It is also useful for individual diagnostics.

The vocabulary, spelling and arithmetic tests are listening tests. This is to avoid contamination by low reading levels of examinees. Items emphasize activities in the every day life of adults. Administrators can give the entire test at one sitting or spread it across several days. If the test is being used in a pre-post situation, it is recommended that one administration strategy be selected and used uniformly.

Several subtests seem to be overly difficult for optimum reliability. In vocabulary tests, nouns seem to be overemphasized. Reading items are weak in recognizing the multi-faceted nature of comprehension. All items seem well constructed.

As in the TABE, norms are grade-equivalent scores. Thus, the limitations pointed out for the TABE also apply to the ABLE. Sections on interpretation of scores are practical and point out limitations as well as strengths.

Reliability was assessed for Job Corps groups and is satisfactory. Reliabilities for basic education groups are especially high. The tests with the weakest reliabilities are vocabulary and arithmetic problem solving. Concurrent validity is provided with the Stanford Achievement Test and is adequate.

The test has a pleasing appearance and is well-constructed.

Although it has some problems, it is stronger than and could be a good alternative to the TABE. It is recommended that local norms be developed, regardless of test used.

Buros, O. K. Ed. (1972). The seventh mental measurements yearbook, Vol. I. Lincoln, NB: The University of Nebraska Press.

WORK VALUES INVENTORY

Published by Houghton Mifflin, Co., the Work Values Inventory is designed to measure the importance of each of 15 scales to the respondent. These scales are: altruism, esthetics, creativity, intellectual stimulation, independence, achievement, prestige, management, economic returns, security, surroundings, supervisory relations, associates, variety, and way of life. The instrument is inexpensive and easily and quickly administered to individuals as well as groups.

The manual is weak in reporting details of test and item reliability. Test-retest reliabilities of .74 to .88 are reported. Concurrent correlations with the Strong and Kuder vocational interest inventories are modest. There is evidence of content validity. Norms are set for grades 7-12, however, this may not detract from its use with groups of young adults as work values do not seem to change to a marked degree with age.

It does seem reasonable that a person's attitude towards the work environment has an impact on vocational behavior. Since the values are closely defined in the manual, it is possible for a counselor to determine from the raw scores alone how a subject values each area. To the degree that the instrument assesses these work attitudes, and the counselor can work such a knowledge into teaching and counseling strategies, the instrument may be of value.

VOCATIONAL INTEREST INVENTORIES

Unlike the Work Values Inventory, the various vocational interest inventories are designed to measure interest in specific vocational areas. As such, they have been extensively used in counseling and job selection situations. The goal in using these instruments should be less in selecting a career than in exploring potential careers and achieving a better level of self-understanding. When used in vocational selection strategies, their self-reporting nature, and the inherent threat of such use, can have detrimental effects on their reliability. Additionally, the concurrent validity between instruments makes their use in such contexts very questionable.

A more appropriate use of vocational interest inventories is in counseling and teaching situations. The perceived criticality of these situations results in more accurate results. In such situations, more information about the individual is gained than in self-professed job interests as the instrument provides more possibilities than the individual can conceive. The instrument then provides the counselor with a means of exploring a wider range of occupational opportunities.

The user should not concentrate upon scores (or norms) in specific occupations. Go beneath the occupational labels and stereotypes to explore the variety of roles within the same occupational category. Help the respondent to consider the abilities, academic prospects, motivation, values, resources, and opportunities.

Several vocational interest inventories to be considered are listed below:

Minnesota Vocational Interest Inventory, Psychological Corp.
For high-school students and adults. Designed to measure how closely one's interests resemble those of persons in trades such as baker, plasterer and retail sales clerk. A second set of scales is based on homogeneous clusters (e.g., office work, outdoors, food service). It has been around a long time and some occupational areas may be dated.

Occupational Interest Survey, Kuder, Science Research Associates.
Form DD. An empirical instrument keyed for various occupations and college majors on the commonality principal.

Preference Record, Kuder, Science Research Associates.
Form E. For grades 7 and up. Shows percentile standing in various interest categories. Administration requires nearly an hour.

APPENDIX H

Revised Design of Follow-up Survey

HELP IMPROVE THE PRE-MILITARY PROGRAM

REMEMBER:

-ALL ANSWERS ARE CONFIDENTIAL
-THIS WILL NOT INFLUENCE YOUR ENTRY TO THE MILITARY
-ANSWER HONESTLY AND COMPLETELY

-THANK YOU!!!

Name:________________

1. Have you re-taken the ASVAB test since leaving the program?

____YES

____NO

1a. If yes, what was your score? ________

1b. If no, when are you scheduled to test?________________

2. Which of the following describes your situation. Mark all that apply.

____I am unemployed

____I have entered the military

____I have a job

____I am enrolled in a college or training school

Name of company/business/university________________________

Address:________________________________

Phone:______________________

Start Date:____________________

# Hours worked weekly:______________

Salary or $ per hour:______________

Supervisor's name:______________

Kind of work:__________________

How would you describe the help you received from the teacher in each subject? Please circle one number for each item.

READING/ENGLISH

```
        1         2         3         4         5
        /---------/---------/---------/---------/
Not At All                                  Extremely
Helpful                                     Helpful
```

MATH

```
        1         2         3         4         5
        /---------/---------/---------/---------/
Not At All                                  Extremely
Helpful                                     Helpful
```

PHYSICAL TRAINING

```
        1         2         3         4         5
        /---------/---------/---------/---------/
Not At All                                  Extremely
Helpful                                     Helpful
```

LIFE COPING SKILLS

```
        1         2         3         4         5
        /---------/---------/---------/---------/
Not At All                                  Extremely
Helpful                                     Helpful
```

After completing the Pre-Military course, how do you feel about joining the military?

```
        1         2         3         4         5
        /---------/---------/---------/---------/
Less Excited                                Stronger,
                                            More
                                            Committed
```

Do you still plan to join the military?

___YES

___NO

THE LAST PAGE-- STICK WITH US!!!

Tell us your opinions on the following:

1. What changes would make the Pre-Military Program better? Please be specific.

2. Would you recommend the program to someone trying to pass the ASVAB? Why or why not?

3. After talking to your recruiter, was the program what you expected? Please explain.

4. Will your experience in the program help you once you are in the military? Please explain.

5. What did you like best about the Pre-Military Program? Be specific.

6. RETURN THIS FORM TO:

MS. LIN HARPER
PRE-MILITARY PROGRAM
P.O. BOX 47
PERKINSTON, MS 39573

THANKS FOR YOUR HELP!!!

APPENDIX I

Original Follow-up Survey

Original Follow-up Survey

Pre-Military Program Evaluation

Name ________________________

The following is an evaluation of the Pre-Military Program in which you participated. Please help us improve the program by honestly and completely filling out this form. Your participation will be confidential and will in no way influence your entry into the military. Thank you for your help in this matter.

Check the phrase that best describes the help you received from the teacher in each subject.

Reading/English
___ Helped me to improve my skills greatly.
___ Helped me to improve my skills some.
___ Did not help me to improve my skills at all.

Math
___ Helped me to improve my skills greatly.
___ Helped me to improve my skills some.
___ Did not help me to improve my skills at all.

Physical Training
___ Helped me to improve my skills greatly.
___ Helped me to improve my skills some.
___ Did not help me to improve my skills at all.

Life Coping Skills
___ Helped me to improve my skills greatly
___ Helped me to improve my skills some.
___ Did not help me to improve my skills at all.

After completing your Pre-Military course, how do you feel about joining the military?
___ stronger, more committed
___ about the same
___ less excited
___ do not plan to join

What changes would you make in the Pre-Military Program to make it better? Try to be specific.
____
____
____

Would you recommend the Pre-Military Program to close friends or relatives who may be trying to pass the ASVAB? Why or why not?

____
____
____

After what your recruiter told you, was the Pre-Military Program what you expected? Yes or No. Please explain your answer.

____
____
____

Do you think your experience in the Pre-Military Program will help you once you are in the military? Yes or No. Please explain your answer.

____
____
____

What did you like most about the Pre-Military Program? Try to be as specific as possible.

____
____
____

Have you re-taken your ASVAB test since leaving the program?
___ Yes ___ No If yes, what was your score? _______

If no, when are you scheduled to test? ________________

Are you currently employed? ___ Yes ___ No

If yes, where (name of company/business): ___________________
Address: ____
Phone: _______________________________
Start Date: __________________________
Number hours worked weekly: __________
Salary or $ per hour: ________________
Supervisor's Name: ___________________
Kind of work: ____
____

APPENDIX J

Additional Reading

Additional Reading

Cook, T. D., & Campbell, D. T. (1979). Quasi-Experimentation: Design and analysis issues for field settings. Boston, MA: Houghton-Mifflin Company.

Rossi, P. H., & Freeman, H. E. (1985). Evaluation: A systematic approach. Beverly Hills, CA: Sage Publications.

"The best part of the Pre-Military is being here. Having this golden opportunity to try to make something of myself, to be a better person, to have a better life, to open doors, having time to think about what I want to do and where I want to go, and to do all I can do."

-Fredrick, Participant

MARKETING PLAN

Linda Kobylarz

Background

To fully man the all voluntary military, approximately 375,000 recruits are required each year. It is recognized that there is a shrinking labor pool available for high quality military recruits. Demographic data indicates that the number of high school graduates continues to decrease. At the same time, the needs of the military for skilled personnel to fill high tech positions increases. It is clear that the Department of Defense must promote the military as a professional choice and become proactive in tapping a variety of sources to recruit manpower.

One such source is the large number of young people who would like to enter the military, but whose academic skills are so weak that they are unable to achieve a qualifying score on the ASVAB. They usually end up in low paying jobs with no future. However, with proper intervention and specialized instruction, many members of this population can be salvaged. It is to that end that the Center for Pre-Military Development was established in April, 1990 at the Mississippi Gulf Coast Community College campus in Perkinston, MS.

The Center houses the Pre-Military Development Program which provides individualized remedial instruction; living/work skills, personal health, values clarification, and responsibility training; and the option for 15 hours of freshman college level work. The program enrolls men and women between the ages of 17 to 30 who want to enter the military, but were rejected due to nonqualifying scores on the ASVAB. Students are referred to the program by military recruiters. The program can accommodate 30 to 35 students at a time. Students may remain in the program until they acquire the skills needed to attain a qualifying ASVAB score and/or complete their GED.

The National Model Center for the Pre-Military Development Program was funded through a grant from JTPA (8% funds) and the Department of Defense via the National Occupational Information Coordinating Committee. The University of Mississippi administers the grant and subcontracts to appropriate entities to accomplish the mission of the pilot effort.

Goal And Objectives

The goal of the marketing plan is to ensure that a steady stream of qualified adults enter the Pre-Military Development Program to maintain a year-round level of 30-35 participants.

Short-term Objectives

1. To develop methods and materials designed to foster program referrals from military recruiters in Mississippi.

2. To develop methods and materials to increase program applications from target populations in Mississippi.

3. To develop methods and materials to enhance program awareness among target population influencers in Mississippi.

Long-Term Objectives

1. To develop methods and materials designed to foster program referrals from military recruiters in the states of Louisiana, Alabama, Tennessee, and Arkansas.

2. To develop methods and materials to increase program applications from target populations in the states of Louisiana, Alabama, Tennessee, and Arkansas.

3. To develop methods and materials to enhance program awareness among target population influencers in the states of Louisiana, Alabama, Tennessee, and Arkansas.

Market Analysis

Key to the successful recruiting of students for the Pre-military Development Program is the careful identification and targeting of markets and market segments. Market segmenting is the process by which "customers" are divided into groups based on common characteristics, needs, and/or desires. Separate marketing programs and promotions are developed especially to address each segment.

Generally, two types of market segmenting are used: demographic and psychographic. Demographic segmenting involves dividing prospects into groups based on characteristics such as: sex, age, minority status, educational attainment, geographic location, and socio-economic status. In psycographic segmenting, prospects are divided according to shared needs, desires, attitudes, beliefs, or perceptions. The most sophisticated segmenting combines both demographic and psychographic attributes.

Three major markets have been identified for the Pre-military Development Program: adults between the ages of 17-30 who are interested in entering the military but have failed the ASVAB, military recruiters, and those entities (schools, agencies, etc.) that influence the targeted adults. Each of the markets can be further segmented as described below.

Military Minded Adults

In the military minded adult market there are numerous segments.

1. By age: young adults (17-20), age 20-25, age 25-30.

2. Male and female.

3. Ethnic adults (Black, Hispanic, Asian, Native American, and other groups whose cultural identity, language, beliefs, and values are different from mainstream white America).

4. High school graduates.

5. High school drop-outs with GED.

6. High school drop-outs with no GED.

7. By location: Mississippi, Louisiana, Alabama, Tennessee, and Arkansas.

8. By community: urban, suburban, rural.

9. JTPA eligible.

10. Welfare recipient.

Some preliminary market research has been conducted on the targeted population through focus groups composed of current program enrollees. The focus group participants included representatives from several of the market segments such as: young adults, males, minority and non-minority students, high school drop-out with GED, high school drop-out with no GED, JTPA eligible, Welfare recipient, urban, suburban, and Mississippi residents. A guided interview format yielded insight to how they learned about the program and what features and benefits attracted them to the program.

Of the 12 students interviewed, most had heard about the program through their military recruiter. One learned about it through the County Welfare office and one from an aunt who works for a social service action agency. The students commented that the recruiters generally gave correct information, but there was some discrepancy in the information given regarding whether or not the college credits aspect of the program was free. The critical role of the recruiters was underscored and the need to assure that they have accurate information was clear.

Students were primarily attracted to the program because it was a way to achieve their goal of entering the military. The education feature of the program meets their need to improve their ASVAB scores and for some to attain a GED. The individualized instruction is very attractive and the opportunity for personal attention appeals to self-esteem needs. Students were also impressed by being on a college campus, participating in college life, and having the chance to earn college credits; all of which helped to make them feel important. That the program was free--meals, room, classes, recreation, etc. was also a key.

Beyond what we have learned from direct interviews with program participants, there is a large body of research on disadvantaged populations that can give us additional marketing insights. In a recent issue paper written for the National Association of Counties, Jodie Sue Kelly* cites several points of interest:

1. Research indicates that low income people share four major viewpoints about their role in society: powerlessness, meaninglessness, anomie (alienation that results from a lack of personal purpose), and isolation.

2. Four distinctive themes of lower class behavior were also identified: fatalism, orientation to the present, concreteness, and authoritarianism.

By combining learnings from research and local information several implications for marketing the program emerge.

Implications For Marketing (Benefits and Copy Points)

1. You will have a job in the military if you complete the program and pass the ASVAB. Also, your ASVAB scores will likely be higher, overall, giving you a better selection of fields in which to train. Emphasis on military career, job skills training.

---

*(Kelly, JTPA Recruitment Made [Much] Easier, National Association of Counties, Washington, D. C.)

2. Individualized instruction, teachers who care, small classes, work independently at your own pace, use computers. Note average length of stay in the program is about 4 weeks.

3. The program is located on a college campus--stress campus life, dorms, recreation, bring your car, bring your boom box, etc. It is a safe environment--good security in dorms. You will never be bored--lots to do on campus (give examples).

4. The program is free--food, dorm, supplies, classes.

5. Program is for males and females.

6. Provide toll free 800 number for information about the program and how to reach a recruiter.

7. Be sure that all information in the brochure is accurate (egs. vacation schedule, no private bathroom, etc.)

8. Use testimonials.

9. The program should portray an image that is highly personalized and supportive giving students the power to make decisions about their own lives.

10. Procedures for entering the program should be simple, their rationale clear.

Military Recruiters

Military recruiters can be divided into several market segments:

1. Army recruiters
2. Navy recruiters
3. Air Force recruiters
4. Marines recruiters
5. National Guard recruiters
6. By location: Mississippi, Louisiana, Alabama, Tennessee, and Arkansas

Interviews were conducted with several representatives of the military including Larry Jones, Education Specialist for the Army, and Colonel Johnson of Keesler Air Force Base. Both Mr. Jones and Colonel Johnson pointed to the reduction in force currently experienced by the military and a trend that will continue through 1995. The significant drawing down of the manpower for the Armed Forces results in greater selectivity on the part of recruiters. Mr. Jones indicated that the period from October to December, 1990 saw the highest quality recruits in the history of the Army. Entrance requirements for all branches of the military are higher than they once were.

Mr. Jones stated that virtually no recruits with an ASVAB score of less than 31 will be considered by the Army and that recent quotas required 72% of recruits to have a score of over 50. The requirements for females are particularly stringent with all female recruits required to have a score of over 50. Recruits with a GED will also need at least 15 hours of college credit beyond the remedial level. The emphasis is to recruit those with regular high school diplomas. Colonel Jones painted a similar picture for the Air Force saying that recruits must be high school grads with a minimum composite ASVAB score of 54. In order to qualify for the more technical jobs in the Air Force, a score of 75 is required. The Navy cut-off score is now 48 on the ASVAB.

Implications For Marketing (Benefits and Copy Points)

1. Referring students to the program must be very simple and require no extra effort on the part of the recruiter (information regarding getting JTPA certification, list of Employment Service Offices, step-by-step how to for the prospective students).
2. Easy to distribute information about the program--maybe a video to show.
3. Benefit--students can sign up for Delayed Entry Program (DEP) and thus guarantee that they will be available by a specified date. Key is entry to 15 college semester hours and an ASVAB score above 50.
4. Students must be assertive in asking about the program.
5. Must "sell" higher command and trickle down to recruiter level.
6. Include information about the success of the program in raising ASVAB scores above 50.

Influencers

There are numerous entities that have access to the target population and exert significant influence over prospective program entrants. They include numerous entities such as schools, public agencies, social service agencies, community based social action groups, etc. The market segments are further outlined below:

1. Employment Service
2. Welfare Office
3. Schools
4. Community centers
5. Churches
6. Food banks
7. JTPA offices
8. Community Based Organizations
9. Community Relations Department for Sheriff's Office, Police Departments
10. Chambers of Commerce

11. United Way

12. Goodwill

13. Salvation Army

14. Boys/Girls Clubs

15. YMCA/YWCA

16. Big Brothers/Big Sisters

17. Urban League

18. NAACP

19. Other ethnic associations

20. Housing project offices

21. Segment by geographic area--state and targeted city

22. Segment by type of population served

Implications For Marketing (Benefits and Copy Points)

1. With diminishing resources and cut-backs in social service and job training programs, the military provides a viable career path for many young adults.

2. The program offers academic and life skill development in an exciting environment--college campus.

3. The program is free.

4. The program has a demonstrated record of success--use testimonials.

Reaching The Market: General Concepts

1. A cardinal rule in marketing is that "People do things for their reasons, not yours". The biggest mistake a marketing campaign can make is to focus on a program's features rather than its benefits. A feature is a description of the program and its services. A benefit is a solution to a prospect's problem or need and let's the person know what's in it for him/her. A feature is usually written in the first person--"We provide..., Our program offers...". A benefit is written from the prospect's perspective and is generally presented as a "You" statement. It is important to focus on specific outcomes when writing benefit statements. Specific outcomes for students in the Pre-Military Program might be: entry into the military, hope for a better future, an opportunity to enter college, security, independence, a better paying job, etc. A recent Yale University study suggests that the following words are among the most persuasive in the English language:

you
free
proven
easy
new
yes

benefits
money
guarantee
health
discover
announcing

results
love
safety
save
sale
now

An understanding of the needs of your target markets and an understanding of the power of addressing benefits will maximize marketing efforts.

2. Research shows that a person goes through several stages before adopting and acting on new information: presentation of the information; capturing attention; comprehension; yielding; retention; and behavior. Generally, people must be exposed to an advertising message at least 5 times before taking action. In his bestseller, Guerrilla Marketing Attack*, Jay Conrad Levison offers a credo for successful marketing: commitment, investment, consistent, confident, patient, assortment, and subsequent.

   a. Commitment - marketing does not work instantly. Expect few results for the first three months. Resist the temptation to change the marketing approach.

   b. Investment - money that is put into marketing is an investment. An adequate investment is needed to garner results.

   c. Consistent - use a consistent format with logo, name, color, style, message that increases program regognition and improves retention.

   d. Confident - people are looking for a program in which they can be confident. Include success stories, testimonials, use reference selling, etc.

   e. Patient - marketing is a good deal like gardening; the farmer must be patient while waiting for the seeds sown to bear fruit.

   f. Assortment - a strong marketing plan includes a variety of methods and approaches to the targeted markets.

   g. Subsequent - marketing is a planned for and on-going process. It is not a one-time event.

Reaching The Targeted Markets

1. A major emphasis should be placed on developing a strong relationship with the recruiting offices in the targeted geographic markets. Entering the market at the command level is advisable. There is an Inter-Service Recruiting Council that is comprised of the head of each of the recruiting services for a recruiting Battalion. A presentation should be made to the group with on-going communication.

   The actual recruiting commands are organized by Battlions, each serving a specific recruiting territory. For example, the Army has many Recruiting Battalions that are part of the 5th Recruiting Brigade. Those of special interest to our program marketing are:

*Levison, Guerrilla Marketing Attack, Houghton Mifflin: Boston, 1989, pp. 28-39.

New Orleans - Louisiana and South Mississippi

Jackson - North Mississippi, part of Arkansas and West Tennessee

Oklahoma City - Arkansas and Oklahoma

Nashville - East Tennessee

Montgomery - Alabama

Each Battalion is headed by a Battalion Commander who should be an initial contact point. The Station Commander reports directly to the Battalion Commander and is the contact at each of the local recruiting offices. An on-going relationship should be maintained with each of them. In addition, each Battalion also has an Education Specialist who usually has a long term association with the area. He/she is another key contact to cultivate.

Marketing tools needed for the military recruiters include: program brochure, program posters, program introduction kit which has information about program eligibility requirements, JTPA certification procedures, list of local Employment Service offices, and a "benefits" sheet which is directed specifically to the recruiter. A video might also be developed. Direct marketing visits, phone follow-up, and regular, written reminders about the program are methods to be employed.

2. Marketing to the potential students is a two-step process. The students must first be identified and then they must be convinced to enter the program. Students will be located through recruiter referrals, through contact with influencers, and through direct marketing vehicles. Recruiter referrals have been discussed above. Reaching influencers (schools, agencies, etc.) will be discussed later.

   Direct marketing vehicles for reaching the targeted population include: direct mailings to drop-outs, food stamp clients, welfare clients, and JTPA participants; press releases in local newspapers; ads in local newspapers; public service announcements on selected radio stations; interviews on talk shows for both radio and TV, public access TV station announcements, posters in high traffic locations; and word of mouth from past program participants. Once a prospective student has been identified, a direct sales approach is suggested with a personal visit to the student or at least several phone conversations.

   Marketing tools include: brochure, information about local recruiters, JTPA certification process information, list of local Employment Service Offices, posters, PSA's (audio and video tapes), video tape of program, and visits to the program site.

3. In order to reach the powerful market of prospect influencers, emphasis should be placed on developing strong agency linkages in each marketing area. Agencies can be beneficial to recruiting efforts in many ways:

   a. Referral source

   b. Provide space to meet with prospects

   c. Counter space for brochures and/or posters

   d. Articles in agency newsletters

e. Piggy-back direct mail pieces with agency mailings

f. Location for events or co-sponsor events

g. Information source regarding community happenings

h. Entry into community network

The agency relationship can run the gamut from simply a place to leave fliers to having a formal referral agreement. Targeted agencies will receive several mailings per year from the program, phone calls on a regular (but not annoying) basis, and visits as deemed appropriate. It is just as critical to maintain and cultivate agency contacts over time as it is to establish them in the first place.

Most of our current agency contacts seem to be with the Department of Employment Services, the Welfare Department, the Department of Social Services, selected community based organizations, and some housing authorities. Although relationships with such agencies listed have proven successful, the program must continue to expand its sphere of awareness. Special attention should be given to reaching organizations that serve women such as the YWCA, Girl's Club, and health centers. Chambers of Commerce, churches, shelters, clubs, etc. can also add new dimensions to out-reach efforts. See Market Analysis list for additional ideas.

In order to effectively work the agency market, the program recruiter must maintain an accurate and up-to-date agency list including name, address, contact, and phone number for each marketing sphere. Responses from agencies to mailings, requests for information, dates of visits, etc. should be recorded for all "active" agencies. A simple file card index is an effective way to keep track of agency interactions.

It would be ideal to have a profile for each agency describing the type and size of the population served (male/female ratio, minority/non-minority, age, neighborhood vs citywide, criminal or drug issues, etc.); mailings the agency sends out; agency newsletter; agency events; etc. We must remember that the goals of the agency linkage effort are: to have al' relevant agencies aware of the Pre-Military Development Program, to identify those sources that can refer to us the highest quality youth that qualify for the program, and to cultivate formal relationships with those agencies.

The suggested approach to cultivating agencies in new marketing areas has several steps:.

a. Compile an up-to-date list of agency contacts.

b. Send direct mail piece consisting of letter, what next response device, and program brochure.

c. Identify most important agencies for an automatic follow-up call.

d. Phone calls or cold calls to other agencies to introduce self, leave brochures, posters, etc.

e. Contact key agencies to establish appointments with agency director--information sharing.

f. Presentations to staff--maybe with program students.

g. Arrange for desk space where appropriate.

h. Establish referral procedures.

Note: be sure to maintain on-going contacts with agencies and to respond to agency requests in a timely manner.

4. Tapping into the school market should be given some special attention by the program recruiters. It should be recognized that schools might see the program as competition. However, we can offer significant benefits to recent dropouts and to those who are graduating and have an interest in the military.

   Methods for reaching the school market are similar to those described above for agencies. Careful consideration must be given to the timing of mailings to schools because there are certain times of the year that are extremely hectic for school personnel. Mid-October to mid-November, February, or after school closes in June might be good times to get dropout lists. April to mid-May would be a good time to talk to schools about the program as a summer transition alternative for some students.

   Mailings can be directed to numerous titles in the school market. Suggestions are provided below:

   Counselors
   Teachers
   Principals
   Assistant Principals
   Superintendents
   School Board Members
   Remedial Teachers
   Voc Ed Teachers
   Coaches
   Social Workers
   Career Development Staff
   Adult Education
   Drop-out Prevention Program Staff

The CIC's School Directory for each state (Market Data Retrieval) will be helpful in targeting schools that are large enough and have the right demographics for our product.

5. Making good use of the press is another avenue for expanding program awareness in our territories. Daily newspapers in our larger markets, weeklies, ethnic papers, agency or CBO newsletters, church bulletins, etc. should all be explored. Whenever feasible, establishing a personal contact with the newspaper's editorial staff or a local reporter is recommended. Press kits will be developed to support that effort. The press kit will make it clear who the designated person is within the program to reach for more specific information, interviews, etc.

   Press releases are an excellent means to get free exposure and develop good public relations, as well. It is suggested that press releases be submitted monthly to targeted papers. Agency newsletters are a good vehicle for this approach. Feature articles might also be possible in some of the weekly papers or agency newsletters.

   Space ads and classifieds are, of course, traditional marketing vehicles and seem to be effective in generating admissions leads. The timing and duration of the ads should be coordinated with other marketing efforts in an area. Some experimentation with the days of the week that an ad is run, length of run, copy, use of simple graphics, etc. and careful tracking of responses to ads will help us to maximize our advertising resources. For instance, some research indicates that our population is most likely to read the want ads on a Saturday morning.

6. The use of PSA's on selected radio and TV stations can reach wide audiences. In many areas, the Job Service regularly has PSA time on radio stations for job openings announcements. Arranging for access to some of that PSA time for a spot about the Pre-military Program should be pursued.

Paid radio spots and radio "events" should be approached with caution. Although the potential exists to reach a large audience, the cost of such ventures is quite high. Selection of the radio station, location and type of event, timing, etc. must be carefully planned. If such a venture is contemplated, a test market approach is recommended. Several months before the proposed event a relatively small amount of time is purchased on the station to see what kind of a response is generated. Decisions relating to the event are then modified as appropriate. Incentive based arrangements are preferable and should also be explored with the station.

Cable TV personal ads offer another opportunity for advertising,however, their effectiveness is uncertain. A market test pilot is suggested.

7. It is clear that the most common referral source for other programs that deal with the disadvantaged is word-of-mouth. This mode of marketing can be very powerful if the students have a positive experience with the program or extremely detrimental if they have not. There are several ways to capitalize on this source of referrals. For example: some stipend for program students that recruit a friend who stays for a specified length of time; contacting program alumnae and offering them some incentives for recruiting students; developing a recruitment kit for students who are about to complete the program; giving those who are considering the program brochures to share with friends; having successful program students assist program recruiters with presentations and leafletting; etc.

Summary

As attested by the above narrative, there are many vehicles for recruiting students into the Pre-military Development Program. The appropriate mix will be a function of the priorities identified, and the financial and staff resources available. The development of a marketing calendar must also await further information about funds and resources available. In any event, it is suggested that the initial marketing efforts be concentrated on the Gulf Coast and Jackson Mississippi markets. A second wave of marketing activity might be directed to New Orleans, Baton Rouge, and Mobile. Additional marketing initiatives would be undertaken as resources and funds allow.

Ms. Linda L. Kobylarz is President of Linda L. Kobylarz Consulting Services in Burlington, Connecticut. She has eighteen years experience in the areas of marketing and sales and she travels nationwide providing seminars and workshops for public agencies and private organizations.

"It's great the way you get these kids qualified and transported to the program so fast after I call you."

-Military Recruiting Officer

GRASS ROOTS RECRUITING

Lewie Mannino

Introduction

In November 1990, with the Pre-Military Program in its seventh month, our enrollment of students was slowly declining. As Staff Assistant in an office thirty miles from the Perkinston campus, enrollment was not my responsibility, nor a particular concern of mine. By the beginning of December our enrollment was down to nine and our classrooms did, in fact, become a great concern to all of us--no students, no program.

At this time I had been with the program for three months and my responsibilities were to see that the Director and Assistant Director had a smooth running "hub" from which to operate and I did not really know or understand where our students came from or how they arrived at the campus.

Discovery

Monday morning, December 3, deciding I wanted to know more about what made our program work, or not work, I visited our local recruiting offices which are housed together just three blocks from our Gulfport office. There were four officers in the Army office, three of whom had never heard of our program. Out of the Air Force, Navy and Marine recruiting offices I found one Petty Officer who had the information in his desk but did not really think students qualifying for our program would be prospective recruits for his branch of the service--especially females.

That day I found myself attempting to sell a program that I, in fact, knew very little about. However, I left the Army Recruiting office with a list of eleven prospective recruits to contact with high but non-qualifying ASVAB scores. A number of them have since completed the program. The negative recruiting officer has since become one of the top three recruiters Coastwide who is supportive of the program--including females.

What I discovered that day was that our source (military recruiting officers) of "raw materials" had literally "died on the vine". I found either a total lack of knowledge about our program, or complete indifference. Many of the original personnel in the recruiting offices who were knowledgeable about our program had been called into active service because of the crisis in the Gulf. Others were not convinced that we would be effective in helping to provide qualified recruits to them.

Remedy

Thus began my campaign to educate and convince not only the professional recruiters, but the man on the street, that what we were offering to the young people in Mississippi was not only unique to the state and nation, but an opportunity of a lifetime--to many an opportunity to turn their lives around.

The Christmas holidays were approaching, things were slow and our office was not very busy, so I took advantage of any free time I had to literally put the word on the streets. People did not really want to listen, but when I could get their attention, the general reaction was either "that's too good to be true", or "what's the catch?". The morning I went to the Army Recruiting office to pick up the first two young men on my list of prospects they had furnished me and take them to our campus, I got **their** attention.

Methods

I approached a major radio station on the Coast to ask for publicity and discovered that my biggest stumbling block was explaining our program. They were hesitant to put anything on the air that they did not understand.

The Director of the Harrison County Welfare Department was a different story. Her enthusiasm for a program that would relieve the number of people her department strived to help daily was the encouragement I needed (wanted) to boost this program.

Next I had posters printed aimed at appealing to our targeted age group, and brochures outlining the program and its requirements. (A reduced copy of the brochure is printed at the conclusion of this chapter.) I mailed the brochures to all Mississippi high school counselors (250) as well as parochial high schools, and began distributing them in Harrison County, receiving full cooperation from both the Welfare Department and the Mississippi Employment Security Commission. They, in turn, placed them in their satellite offices through out the county--with great results. (One student saw a poster while waiting with his aunt in the Child Support office and called the Army Recruiting office.)

That same week I contacted the past president of the Coast Chapter of the NAACP. She placed posters in the churches of her community, and put me in touch with the current president. The response and results were immediate.

In Biloxi I visited the Navy Recruiting office and the manager of seven government subsidized apartment complexes. She gave me full cooperation and distributed brochures and posters to all the complexes. I have recruited four young men from one of these complexes.

With encouragement from the Director of the program I began to branch out into adjoining Jackson County, beginning with the military recruiting offices and on to the Jackson County Welfare office.

A great source of contacts has been to ask each person I call on to give me a suggestion of someone else to contact. The Jackson County Director of Welfare suggested the Food Stamp Employment and Training Office (FSE & TO). It has been my privilege to speak before their group sessions of citizens receiving benefits. The director, in turn, gave me a list of all their offices in the state, twenty-three in all. I have, as time and distance has allowed, begun systematically contacting them and speaking to their group sessions. On several occasions a military recruiting officer has accompanied me and talked with those eligible and interested in the military. This organization is especially enthusiastic about helping us because they, also, are funded by the Job Training Partnership Act.

An employee in the Harrison County FSE & TO referred me to a friend in a business fraternity. I was invited to speak at one of their meetings and became acquainted with a Biloxi High School coach. He made our program a personal project and invited former students of Biloxi High to a meeting for me to present our program. As a result I recruited five students over a period of two months and have a waiting list.

Results

At this point each contact I made was like a new branch of a giant oak. I have spoken before welfare recipients, civic groups and recently, the Non-Denominational Ministerial Association of Moss Point. I have placed posters in the police and sheriff's offices, Salvation Army, churches and public places I felt appropriate. So far we have had not one word of criticism of our publicity--only praise for what we are doing for the youth in our state. I have had displays in mall shows, notices in church bulletins, and recently a fifteen minute segment of a Saturday television show, "Coastal Views with Billy Knight", featuring our Director, Dr. Borne.

Today our classrooms are filled and we have a list of students waiting for an opening.

Recommendations

The key to the success of recruiting qualified, enthusiastic students is the military recruiting officer. Their support of our program and positive recommendation to the prospective recruit is absolutely essential. I have found, though, that they need routine contact to remember to send us students qualified for our program. If I call on one I have not talked with in about a week, he will invariably remember someone he would like to recommend. Also, several have discussed with me the fact that these students need special nurturing (talk with them in their home with their parents, accompany them to the State Employment office to receive JTPA eligibility, and in many cases transportation to the campus). The recruiting officers say they do not have time for this and without it many of their potential recruits would never make it to the program or the military.

What would an average day be like?

7:00 - 7:45	Breakfast
8:00 - 9:45	Class
9:45 - 10:15	Break
10:15 - 12:00	Class
12:00 - 1:30	Lunch and Free Time
1:30 - 2:45	Class
2:45 - 3:15	Break
3:30 - 5:00	Class/Physical Training
5:00 - 7:00	Supper/Free Time
7:00 - 8:00	Study Hour
8:00 - 11:00	Free Time
11:00	Lights Out

What does the participant need to bring?

Sheets/Blanket/Pillow
Towels/Wash cloths
Personal items (toothbrush, toothpaste, soap, shaving gear, etc.)
Comfortable clothes for class such as jeans, etc.
Cut-offs/shorts/sweats and gym shoes for physical training
Alarm clock/radio

Safety

There are around-the-clock security guards on the campus and resident hall managers in all dorms. Participants must agree to abide by all safety measures on the campus.

For Further Information,
Contact your local Armed Forces Recruiter

Want a career?
Need better job skills?

ENROLL IN THE
PRE-MILITARY DEVELOPMENT PROGRAM
at MGCCC's Perkinston Campus

To enter, you need to be:

- **Between age 17 and 30**
- **JTPA eligible**
- **Interested in preparing yourself for work**
- **Willing to enter the military**

The program is
NO COST TO YOU.
Meals, housing, books, fees, and tuition
ARE FREE TO YOU.

To enroll or for additional information, contact your local Army, Navy, Marines, Air Force or National Guard recruiter.

Mississippi Gulf Coast
COMMUNITY COLLEGE

RECRUITERS/COUNSELORS MAY CALL (601) 928-6268

BROCHURE COVER

What is the Pre-Military Program?

The Pre-Military Program is designed to assist young, motivated men and women in enhancing their basic skills and academic background so that they can enter the military service of their choice, be successful soldiers, and expand their career options.

How does a participant qualify for the Program?

The participant must be medically and morally fit, must have scored 21 or above on the ASVAB, and must be JTPA eligible.

What benefits do the participants receive?

Each participant will be in an all-expense-paid, highly motivating and meaningful program which can enable him/her to be successful in a productive career and as a citizen.

Where is the Program located?

The program is housed at the main campus of Mississippi Gulf Coast Community College in Perkinston, Mississippi. It is located on Highway 49 South, 30 miles north of Gulfport and 40 miles south of Hattiesburg.

What does the Program cost the participant?

The program is funded through the Job Training Partnership Act (JTPA). Free housing in dormitories (minimum of 2 persons per room with a private bath), free meals (3 meals per day, 7 days per week at the campus cafeteria), and free instruction is provided.

The participant needs to bring spending money and money to do laundry.

If a participant wants to bring a private car, a $3.00 parking fee is required.

How long does the Program last?

The program is designed to be individually-paced so that the participant can exit at his/her own rate. We recommend a minimum stay of 30 days.

What about weekends or holidays?

Participants may stay on campus over weekends and meals will be served. Or, they may go home for the weekend provided they have their own transportation.

Holidays that the school will be closed will include Thanksgiving (Nov. 22-25), Christmas (Dec. 15-Jan. 6), and Spring Break (May 18-26). Students will not be allowed to remain on campus during these dates and must be able to provide their own transportation from and back to campus. Limited transport services may be available and we will work with each participant to help with this.

What is the enrollment procedure?

The military recruiter sends the prospective participant to the Employment Security Commission office (the employment office) to be JTPA certified. If certified JTPA eligible, the prospect must return to the recruiter with a signed JTPA certification statement. The recruiter will sign a form for the participant to bring to the Director of the Pre-Military Program. The participant may also have to be put on a waiting list for the program and his/her recruiter will advise on that.

Other entry forms must be signed once on campus, including an agreement to attend all classes, an agreement to abide by the college's and program's rules and regulations, and an agreement to join the armed forces on successful completion of the program.

BROCHURE INSIDE

"I really see improvement in my math classes and also my reading classes."

-Willie, Participant

ADMINISTRATIVE OVERVIEW

Lin Harper

MGCCC Pre-Military Program

There are three major areas which I would like to address from an administrative standpoint:

1. Teaching methods for at-risk students
2. Qualifications for teachers in a program such as this
3. Summary of success to date

Teaching Methods

As can be inferred from the curriculum materials developed by our instructors, no teacher wanted to be tied down to a particular textbook or a prescribed curriculum. Each instructor identified the goals of their particular class and worked up materials which would allow them to meet their goals, pulling in materials from a wide variety of sources, including magazine articles, textbooks, library resources, videotapes, guest lecturers and teacher-made materials.

A program such as this is teacher-intensive, meaning that the student/teacher ratio MUST be low if each student is to receive enough individual attention to be able to achieve their goals. These students come to us with many needs, not all of them academic, and we must be able to spend time with them and address their needs in other than academic areas as well as their classroom needs.

We have found that a combination of teaching methods works well. We use both classroom activities and computer assisted instruction, as well as individual instruction when necessary. Teachers spend as much time as possible being accessible to students, including on student breaks and during times when classes are not in session. Those students who are really serious about their work will take advantage of these times to come for extra help or just extra time with that teacher.

When disciplinary problems arise, as they inevitably will, we also use a team approach whenever possible to handle those problems. The house manager, counselor, and instructor or instructors will gather with the student in an effort to identify the problem behavior and to identify how that behavior might be changed or extinguished. It is very important not to give the student the idea that you are "ganging up" on him, but to be supportive of his remaining in the program and changing that behavior which is not working in his behalf. It is equally important that the student be given choices, allowed to make those choices, and have the consequences of those choices clearly outlined for him. It is then up to the staff to enforce the consequences if the student does not live up to his agreement. While this method is, again, staff-intensive, it allows the student to begin to learn about responsibility for self and his choices, and it is only fair to the student that he be allowed to learn this all-important lesson.

Computer Assisted Instruction

To assist us in reaching our goals, Dr. J. E. Shankle, Vice Chancellor, Computer and Information Systems, at the University of Mississippi, assigned the partial use of an 860 mainframe computer to this program. A 9600 baud line with D 1 conditioning runs from the mainframe at the University of Mississippi to the Gulf Coast Community College campus approximately 325 miles away. One 8 port Multiplexor with a 9.6 modem 2030-34 is installed at the mainframe site and one at the Community College campus. The decision on the equipment and lines needed to tie into the University mainframe was made by Dr. Shankle in consultation with an AT&T Account Executive.

The long range vision for a central computer based computer assisted instructional system was written by Dr. Shankle. He envisioned a Computer Assisted Instructional System for education of potential recruits for entry into the military to have the following major requirements:

1. The system would meet the special needs of the intended users by communicating in a comfortable and natural manner, at least in the initial phases. Such an ease of communication would be valuable to both participants and instructors.
2. The system would provide central control, regardless of the number of students, or type of equipment utilized by the students.
3. The system must be capable of generating reports and necessary statistical data.
4. The system would be developed in such a manner to take advantage of all sizes and ranges of systems, from mainframes to micro systems.
5. All course modules would be maintained on the mainframe and down-loaded if run on microcomputers to aid in detection of system deficiencies as well as providing low cost instructional support through remote terminals.
6. The system designed in this fashion could permit development from one location, be administered from another, and evaluated from yet another.

Our fifteen month project has been mainframe supported with a generous contribution from Control Data of a lab with 8 PLATO terminals and the Control Data PLATO coursewear. Additionally, we have added JSEP to the computer system, as well as Control Data Corporation's life coping skills courses such as stress management, time management, communications, GED and writing.

PLATO

Our staff works with 26 - 30 students at one time so that the staff can provide individual attention to each student. When each student registers, he is given a TABE test, usually level four. Then an IEP is written for that student prescribing lessons to assist him in upgrading weak skills.

The class schedule provides for four hours of intensive academics each day; one and one-half hours each day for life coping skills and physical fitness. The PLATO computer lab is open all day and until 9:00 at night five evenings a week. Most students are required to use the lab for one hour and encouraged to use it nightly as well. Eddie Carr has clocked 56 hours of lab use in two weeks; William Banks has clocked 40 hours in little over three weeks. Most students are volunteering to use the lab in the evenings, 4 to 5 hours weekly.

Initially, the traditional Control Data courses of math and reading were used exclusively while our staff became more familiar with the equipment and its utilization. After several weeks, JSEP was added to the system and now a student may select the MOS he wants and the staff does a customized MOS template for that student. As the student works in the areas of electronics, mechanics, map reading, pulleys and gears, he is helping to raise his line score in other areas as well. The students like the PLATO system because it is military oriented from the first. They call this system the "serious" computer.

The Mississippi Gulf Coast Community College staff uses the system daily for reinforcing what the students are learning in math, reading and life coping. Also, what the students like best on the computer today, the staff incorporates into tomorrow's class lessons.

The effective combination of motivation of the students, caring and nurturing by the staff and the quality of PLATO lessons has enabled this program to be unusually successful.

Qualifications Of Instructors

A discussion of teaching methods very naturally leads to a discussion of instructors and the qualities those instructors need. I have divided qualifications into two categories:

1. Academic/Professional Qualifications

2. Personal Qualifications

Academic Qualifications

An instructor should have at least a bachelor's degree in their field of specialty with courses in psychology or social work; they should preferably have some teaching experience at the high school or junior high school level. Work experience with learning disabled or emotionally disturbed clients is also a plus, because these people will be working with young men and women from socially and culturally deprived backgrounds who will manifest a wide variety of behavioral and psychological problems.

Personal Qualifications

This is by far the most important category to me. Teachers in a program such as this must be dedicated educators, and they must be able to instill a sense of excitement about learning into their students. They must be able to reach out to students from different cultural and social backgrounds from their own, and they must be able to distinguish a student's behavior from the student himself. They must be flexible, tolerant, creative, and intuitive. They must persevere in trying to establish communication between themselves and the students and between students themselves. They must have the ability to provide positive nurturing to these students as well as the ability to set limits and enforce them. Teachers must be able to give constructive feedback to students and to focus on positive behaviors instead of negative. Teachers must be able to represent your program in a positive light, including speaking in public. They need good stress management skills and the ability to cope with difficult, and sometimes highly emotional, situations in a positive manner.

Summary Of Success

To date, the Pre-Military Program has enrolled 160 students. Of these, 63% were black and 37% white; 84% were male and 16% female. The drop-out rate is 11%. We have enlisted 30% of our participants; the number in school or employed is 16%. 15% have passed their GED test. The remaining are non-successful completers or are students from which we have not heard regarding their ASVAB scores.

Ms. Lin Harper, from Hattiesburg, Mississippi, is currently Director of the Pre-Military Development Program at Mississippi Gulf Coast Community College. Ms. Harper has eight years experience as a counseling psychologist and is co-owner of Interphaze, a technical communications consultancy.

"In my opinion the program is a good thing for young Mississippians to enter. It helps you raise your score on the ASVAB."

-William, Participant

CONCLUSIONS AND RECOMMENDATIONS

Jane S. Borne, Ed.D.

Further Study

The 1990-1991 Pre-Military Development Planning Grant staff successfully completed each task as outlined in the plan of work approved by NOICC. Eleven consultants produced deliverables in their particular area of expertise. These deliverables have already been helpful to the residential pre-military program at MGCCC, and will continue to be helpful to other agencies as they replicate the program in their own geographic areas.

In addition to the consultants deliverables providing helpful recommendations, the instructional staff at the MGCCC Pre-Military Program have shared their curriculum design and instructional suggestions (see Appendix A, B and C) for use by others who might choose to replicate the program. Also, the Counselor has outlined specific successes of the MGCCC program.

As a result of this study, basic conclusions formed by the University of Mississippi Planning Grant Staff are:

1. There is a need to assist high school graduates and non-graduates in increasing basic skills, life coping skills and physical fitness to enhance their opportunity for military service.
2. The focused, intensive, nurturing, residential program at MGCCC is highly successful in helping students achieve academic goals and in increasing TABE, ASVAB, and other diagnostic test scores.
3. The highly skilled staff, dormitory and cafeteria facilities, the contribution of the use of the University of Mississippi's main frame computer, and Control Data Corporation's donation of the PLATO system and terminals make it feasible for the MGCCC program to expand beyond state lines and serve four adjacent states when funding can be secured from a national rather than local (JTPA) source. Also, 300, rather than 150, students might be served when national funding is secured.
4. It seems appropriate to request Congress to fund a one-time $5 million appropriation for the operation of the MGCCC program and to use these funds as an endowment, with the annual interest proceeds used for operating expenses. At such time that the program is no longer necessary MGCCC will return the $5 million to Congress.
5. It seems necessary to add a full time recruiter to the staff to work as a liaison between the military recruiters and service agencies such as welfare, employment offices, churches, schools and community organizations. This recruiter would also assist in coordinating transportation to get students to the program, and would be responsible for publicity and public relations.

The University of Mississippi planning grant staff, in conjunction with MGCCC staff, recommends several areas for further study. These are:

1. Research for a computerized English to English translation program is needed to assist minorities who speak predominantly dialectal English.

2. It seems feasible to study the possibility of expanding the concept of the pre-military program into an intensive but broader pre-employment program to assist military aspirants as well as civilian worker aspirants. Additionally, this program could prepare students for successful work in the proposed National Service Program as sponsored by the Kennedy/Hawkins National Service Bill.

3. There is a need to study the feasibility of assisting junior and senior high schools in incorporating intensive focused, academic classes for at-risk students, modeling the MGCCC design with anticipated similar successful results.

In all aspects the pre-military planning grant and the JTPA funded residential program at MGCCC have been highly successful with perhaps one weak link being accurate and complete follow-up on every student participant.

Programs such as this pre-military development one will be the educational programs that insure our national survival until such time that public education fully handles its role and responsibility of placing educated citizens into the adult world of work.

Dr. Jane S. Borne is Project Director for the University of Mississippi's Pre-Military Development Planning Grant. Dr. Borne has extensive experience in teaching, educational administration, and implementing innovative educational programs designed to meet specific target audiences. She is co-owner of an educational publishing company.

APPENDIX

Sample Pages - JTPA Proposal

TIME FRAME OF PROGRAM:

1. OPEN ENTRY/OPEN EXIT: YES X NO ____

2. NUMBER OF TRAINING CYCLES: 1

3. APPROXIMATE LENGTH OF TRAINING CYCLE: 160 Hours (Average) 4 weeks

4. ACTUAL STARTING DATE FOR PARTICIPANTS: July 1, 1990

5. NUMBER OF HOURS OF TRAINING PER WEEK: 40 hours/week

6. ACTUAL CLOSURE DATES: July 2 - 5; Sept. 3; Nov. 22-23; Dec. 15 - Jan. 2; March 29; May 11-26

7. DAILY TIME SCHEDULE: 8:00 - 12:00 , 1:00 - 5:00

*NARRATIVE DESCRIPTION OF THE PROJECT

Write a comprehensive narrative description of the project incorporating all of the required elements of the program design, the processes involved in implementing the program, and the complete scope of services available for participants. (*Include the narrative description provided in the proposal).

The mission of this program is to recruit, house, feed, instruct, train, and counsel a minimum of 36 participants at a time (50 participants total) for positive termination into the National Guard. The program will be housed on the Perkinston campus of Mississippi Gulf Coast Community College. The University of Mississippi personnel will be actively involved in the implementation of the program.

The participants to be served are those young men and women ages 16-30 who want to enter the National Guard, who meet the criteria for entry but who are rejected due to non-qualifying scores of 20 or above on the ASVAB, who are within the guidelines of JTPA income eligibility and who are referred to our program by the National Guard recruiters.

The individual participant will progress through the program at his/her own pace. Competencies to be attained will be based on each individual participant's ASVAB score which will indicate the deficient area/s such as reading, math, etc. Additional appropriate diagnostic and placement tests such as the TABE will be used to help determine very specifically where remediation is needed. These test/s may also serve as pre and post tests to determine the level of remedial effectiveness upon completion of the semester program.

Additional diagnostic and placement tests, commitment and responsibility success indicators, and technical and human skills assessment may be used when deemed appropriate by the professional staff as aids in providing more specific instruction for individual participant success.

Four hours of remediation per day will be provided each participant using individualized instruction, computer assisted learning, and group and classroom instruction as appropriate with continuous educational tracking. Four hours/day in a diverse living/learning environment will be provided to include living and work skills, career counseling, creative use of leisure, physical improvement, leadership skills and team work to enhance their productivity in their job placement.

Participants will be given specific training in utilizing the Employment Office and newspaper job advertisements as possible avenues for employment. In addition, the personnel will work with the State Occupation and Information Coordinating Committee (SOICC) to provide continuous up-date of job listings in Mississippi.

Campus facilities will be available to the JTPA participants in the same way as they are to regular Perkinston students. This includes a gym, weight room, track, playing field, game room, student union, etc. Meals will be provided in the cafeteria with the regular students.

Participants will exit from the program as soon as instructors feel confident that they can pass the ASVAB. Those who succeed will be placed in a National Guard job where they will also have the group support of other Guardsmen. Those who may not successfully complete the program by obtaining the ASVAB score necessary for Guard enlistment will have counseling available and every effort will be made to place them in jobs within their community.

STATEMENT OF WORK

NAME OF PROGRAM/COURSE Pre-Military Training for National Guard

NAME OF ACTIVITY REMEDIAL EDUCATION ACTIVITY CODE 60

PROJECT CODE 505400

GEOGRAPHIC AREA OF SERVICE: Statewide

TARGET GROUP AND MINIMUM ENTRY LEVEL REQUIREMENTS:

Men & women JTPA eligible age of 16-30, who meet criteria for entry into Armed Forces but make a non-qualifying score of 20 or above on the ASVAB and who are referred to this program by a military recruiter.
(A maximum of 25% of the participants may be noneconomically disadvantaged.)

DEFINITION OF SATISFACTORY COMPLETION:

Successful Completer:

1. The participant passes the ASVAB with a score of at least 31 and enters the Armed Forces.

or

2. The participant remains in the program for a minimum of 4 weeks, increases their reading level by two grade levels as reflected through use of the TABE, but is unable to increase reading skills enough to pass ASVAB with a score of 31 but does obtain employment in the civilian sector.

SLOT LEVEL: 30
Number to be served: 150
TIME FRAME OF PROGRAM: July 1, 1990 - June 30, 1991

SUMMARY OF PROJECT GOALS

I. To serve and enroll 150+ JTPA 8% participants with a reading level at or below 8.9.

II. To serve a minimum of 113 economically disadvantaged JTPA 8% participants.

III. To serve 125 youths who are 16 through 21 years of age.

A. To serve 25 youths who are in-school & at-risk.

B. To serve 100 youths who are out-of-school.

IV. To serve 25 adults who are 22 years of age or older.

V. To ensure that 90 participants are successful completers. (A minimum of 60% of the participants must be successful completers).

VI. To ensure that 150 participants are terminated by June 30, 1991.

VII. To maintain a federal 8% cost per participant of $ 1187 . (Total Federal Cost divided by Total Participants = Cost Per Participant).

VIII. To ensure a maximum federal 8% cost per successful completion of $ 1978 . (Total Federal Cost divided by Total Participants Successfully Completing the Programs = Cost Per Successful Completion).

IX. To ensure that enrolled participants attend their scheduled instruction 70% of the time.

X. To retain 120 of enrolled participants for a minimum of 50 hours of instruction. A minimum of 70% of the participants must be retained.

XI. To prepare a final evaluative report, by July 22, 1991, incorporating the project goals mentioned in I thru X.

GENERAL PROGRAM DESCRIPTION:

The period of operation is Program Year 1990, beginning July 1, 1990 and ending June 30, 1991. All 8% literacy programs will serve participants age 16 and above who currently function at a reading grade level of 0 through 8.9. At least seventy-five percent (75%) of the participants served must be economically disadvantaged as defined by JTPA guidelines.

Each program provides a clearly defined network of activities and services focusing on a combination of components to improve the functional literacy skills of the participants.

The following elements are included in the program design:

I. Assessment of academic skills, goals, special needs and expectations to determine each participant's curriculum and placement into literacy activities.

Each participant is initially tested and interviewed to determine his needs, strengths, and goals.

II. An Individual Education Plan (IEP) is used to develop and document lessons and goals for each participant. The IEPs are structured to provide the participant with attainable short-term goals to achieve within 50 hours of instruction. Participant goals are set to ensure that basic skills are learned and can be applied in ways meaningful to each participant.

The IEP and completed work is used to communicate/report progress to the participant on a frequent basis. The IEP is adjusted as needed, if the participant's progress is faster/slower than expected. At the end of each 50 hour segment of instruction, an evaluation of progress is completed and discussed with the participant. If a decision is made to continue the participant's education the IEP is updated to reflect goals for the next 50 hours of instruction. These records are maintained in each participant's file.

III. Individualized lessons are contextual, learner-centered, criterion-referenced, and goal-driven as prescribed in the IEP.

The program uses individualized instructional materials and teaching strategies. Course content is directly related to the learner, the labor market, and the community's needs. A mechanism to gain input from community and labor market leaders is in place. These community leaders assist in the overall plan, review and evaluation of the program.

The curriculums used include writing, reading and math. Instructional methods include a variety of small group instruction, computer-assisted instruction (CAI), and one-on-one tutoring when justified by assessment, goals, or flexible scheduling needs of the individual.

IV. In-service training for volunteers is provided on a continuing basis.

V. Participant support groups, including recognition events for participants, are included. Public and private sector involvement is sought to assist in these activities as well as to recruit participants and strengthen the overall network of support. Every effort is made to give credit to these entities.

VI. Program is evaluated based on participants' progress, attendance, retention rate, cost and amount of match generated.

The project operator is not required to provide transportation and child care services. However, these services are worthy of consideration and are classified as participant support costs.

VII. Each program serves a minimum of 35 participants.

VIII. Each program includes at least two full time staff or the equivalent. These staff must be prorated between the administrative and training cost categories, as appropriate. Their duties include but are not limited to the preparation of required JTPA financial and participant reports. These staff may be titled coordinators, teachers, counselors, aides, etc. The proration between cost categories for staff will differ according to program needs and the type of matching contributions.

VIX. Program operators provide time for tutors to receive four hours of staff development delivered via teletalks by Mississippi Education Television (ETV). Dates and times of staff development will be provided.

The University complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, creed, color, national origin, race, religion, sex, handicap, veteran or other status.